july
december 1961

Vol. 167

ENGINEERING NEWS-RECORD

Serving The Entire Construction Industry

Index

. . . of editorial content

McGraw-Hill Publishing Co.
330 West 42nd Street, New York 36, N. Y.

How to Use this Index

Every article appearing in *ENGINEERING NEWS-RECORD* is indexed with the exception of Briefs (such as "Labor Briefs", "Around the World", "Careers") and of Obituaries.

All articles are indexed **alphabetically** by subject. Under each heading entries are listed **chronologically** as they appeared.

Many important headings are divided into sub-headings e. g.: BRIDGES – geographically by states or countries; CITIES – by name; BUILDINGS – by type (Churches, Garages, etc.); LABOR – by subject (Contracts, Strikes, etc).

The latter part of this index contains AUTHORS, PERSONALITIES; COMPANIES. Here are listed the names of people who are the subject of articles, as well as names of authors of by-lined articles and published letters. Under the COMPANIES heading, equipment manufacturers' names will be found, also firms about which articles were written. Individuals or firms mentioned in feature articles dealing with various construction projects are seldom indexed by their names.

Items which describe new types of equipment are indexed twice: under the manufacturer's name in the COMPANIES section, and under the proper subject, e. g.: PLASTICS, or EQUIPMENT, • Drills.

Entries concerning only particular projects or firms are not repeated under the general heading. For example, an article about the Smith Construction Co. appears only in the COMPANIES section of the Index and will not be found under the heading: CONTRACTORS. A news item about bonds issued for Berkshire Thruway will be listed in the New York section of HIGHWAYS and will not be found under: CONSTRUCTION, • Financing, when general stories on bonds are listed.

See means that all entries on the subject will be found under another heading, thus:
EROSION **see:** SOIL MECHANICS

See also means that a related heading should also be checked, thus:
SEWAGE **see also:** WATER POLLUTION

The following abbreviations and signs are used:
RC — Reader Comment
CW — Construction Week
WO — Washington Observer
NP — New Product
e — Editorial
** — Article with many illustrations
* — Illustrated article (if asterisk precedes entry, reference is to a picture with caption only)

If you would like any information about material which EN-R has published, do not hesitate to make direct inquiry by mail or telephone to: Mrs. Eva Gierat, 28th floor, 330 West 42nd Street, New York 36, N. Y.; telephone LOngacre 4-3000 extension 3507.

ENGINEERING NEWS-RECORD INDEX

July-December 1961

A

ACCIDENTS, see also: EXPLOSIVES; FIRE; FLOODS; SAFETY; WEATHER
Investigation on collapse of Texas Tower #4. CW p17 — Jul 6
Cave-in at the site of Seattle's new City Hall,*. p23 — Jul 6
Coroner's inquest into Toronto subway construction accident. CW p17 — Jul 13
Steel girder kills worker on Pan Am bldg, NYC; roof collapses in Saginaw, Mich. p27 — Jul 20
Phila's Mill Creek sewer caves in, 3 dead,*. p22 — Jul 27
Fire and water cause cave-in of San Rafael freight line tunnel, Calif. p23 — Jul 27
Erection methods blamed for Harrisonburg bldg collapse,*, diags. p22 — Aug 3
Improper bracing caused Toronto subway roof collapse,*, diags. p26 — Aug 10
Learning from failures. e p92 — Aug 10
Lowry AFB accident kills five. CW p17 and e p128 — Aug 17
Earth slide or big wave came first at West Point? CW p15 — Aug 31
Staten Island barracks settlement due to broken drain. CW p15 — Sep 28
Illinois ASCE discusses construction failures. RC p14 — Oct 12
Hurricane Esther damages a Chesapeake Bay tunnel tube. CW p17 — Oct 12
Japan to institute new bldg code after landslides,*. p50 — Oct 19
Owl's Head treatment plant tank collapse analyzed,*. p23 — Nov 2
Jacob Feld, specialist on structure failures,**. p50 — Nov 9
Steel frame hangar in Oneida, N.Y., and factory in Haverstraw, N.Y., fail. p24 — Nov 23
Steel elevated water tank falls in Jackson, Miss. p25 — Nov 23
Boys start bulldozer in Delaware suburb, smash houses. CW p17 — Nov 30
Waco Dam slide laid to rock fault,*. p22 — Dec 7
Girder launcher slips on Seattle freeway job, hurts three men,*. p22 — Dec 14
Failures spur engineer inspection law in Michigan. p26 — Dec 14

ACOUSTICS
Dallas radio and TV station shuts out city noise,**. p44 — Jul 13
Spraying produces acoustical ceiling,*. p141 — Sep 21
Acoustical ceiling vents air,*. NP p65 — Nov 16

ADHESIVES, COATINGS, INSULATION, PAINT, SEALANTS, see also: PLASTICS
Pattern spray gun for drywall textures. NP p46 — Jul 6
Glass fiber insulators reduce busway weight,*. NP p50 — Jul 13
Zinc coated steel grips paint, speeds welding. NP p51 — Jul 13
Coating plus fiber equals new covering for old roof. NP p51 — Jul 13
One coat enamel cuts steel curtain wall costs. NP p55 — Aug 10
Epoxy resin binds new concrete to old on Columbia River dams repair,**. p44 — Aug 17
Coated asbestos wall cuts down on dust. p43 — Aug 31
Adhesive instead of nails for gypsum wallboards in US Steel's prefab homes. CW p37 — Sep 21
Vinyl coating compound colors chain-link fences. NP p143 — Sep 21
FHA to allow glued components. CW p17 — Oct 5
Urethane foam roof insulation. NP p71 — Nov 16
Skin coating prevents dry or wet cement burns. NP p71 — Nov 16
Foam urethane for wall insulation,*. p39 — Nov 30

AERONAUTICS AND SPACE ADMINISTRATION, see: AIRPORTS; DEFENSE; MISSILES

AIR CONDITIONING, HEATING, VENTILATION
Montreal ice rink: heating and refrigeration pipes,*. p55 — Jul 20
Tower addition for air conditioning units in Houston hotel,*, diag. p42 — Aug 3
Packaged heat pumps cool mall, Birmingham, Ala, shopping center,*. p49 — Aug 10
Air walls in Gas Inc. exhibit at Worlds Fair,*. p21 — Aug 24
Economical electric heating for convent in North Dakota,**. p41 — Aug 24
Fluorescent lamps heat office. p136 — Sep 21
Variable pressure system sweetens laboratory air Kopper's center, Penna. p27 — Oct 5
Electric Heat Conference wants to push heating devices into bldgs. p22 — Oct 12
Metal grid cuts fuel oil costs,*. NP p47 — Nov 9
Helicopter positions ventilators on Calif factory roof,*. p25 — Nov 16
Filter foils fallout, germs, gas in Am. Chemical Society's Washington shelter. p26 — Nov 16
Gas fed cell can provide home's electricity, heat and cool. p58 — Nov 16
Lennox roof top heaters, condensers and cooling evaporators,*. NP p67 — Nov 16
Electric heating costs. RC p7 — Nov 23
Package coal boiler feeds and stokes itself,*. NP p56 — Nov 23
Packaged liquid chiller follows compact trend. NP p57 — Nov 23
Aluminum penthouse ventilators. NP p56 — Nov 23
Heat ducts in plywood floor panels for Calif school,*. p39 — Nov 30
Heating system cuts costs by storing internal heat. p118 — Dec 21
Big gas boilers designed to fit small spaces. NP p123 — Dec 21

AIRCRAFT, AIR LIFT
Airlift affects prices of Hawaiian hwy. p47 — Sep 7
Helicopter carries ready mixed concrete to build transmission towers in Calif,*. p42 — Sep 14
Helicopter positions ventilators on factory roof,*. p25 — Nov 16

AIRPORTS, see also: BUILDINGS, Hangars, Terminals; MISSILES; PAVING
House balks at long-term airport aid. WO p19 — Jul 13
Long range airport aid in doubt. p23 — Aug 10
Airport aid bill faces rough take off. WO p19 — Aug 24
Task force prescribes airport boom. WO p19 — Sep 14
Long term airport aid bill killed. p48 — Sep 21
Blow to airport planning. e p72 — Sep 28
Federal government steps up pressure on communities for airport improvements. p26 — Nov 16
FAA invests $4.6m in mobile lounges. WO p19 — Nov 30

• American

California
Navy builds Lemoore jet base on schedule at right price,**. p24 — Jul 13
Heliport tops Oakland garage,*. p30 — Oct 19
Los Angeles new airport offers jet parking around terminal bldgs,**, diag. p34 — Oct 19

Colorado
Long jet runway at Stapleton Airfield,**, diag. p52 — Nov 16

Michigan
Detroit Metropolitan Airport scheduled for $21m expansion. p26 — Nov 2

New York
Heliport will top PNYA exhibit at World's Fair,*. p22 — Sep 28

Texas
Houston plans $84m airport,*. p26 — Nov 9

Virginia
Dulles Airport job boasts ideal first aid station. p27 — Oct 12
Dulles Airport: airlines reluctant to build own hangars. CW p21 — Oct 19

ALUMINUM
Biggest dome for Detroit "Showcases". RC p10 — Sep 7
Detroit home pioneers with aluminum posts and joists,*. p24 — Sep 7
Aluminum panels wall in meat-packing plant cold rooms,*. p33 — Sep 14
Aluminum and steel make new type high voltage transmission tower. p42 — Sep 14
Curtain wall interlocks without nuts or bolts. p143 — Sep 21
Congressional eye is on aluminum for monopoly and antitrust investigation. WO p19 — Oct 12
Corrosion hits British aluminum prefabs. p50 — Nov 2
Penthouse ventilators. NP p56 — Nov 23
Aluminum beams make concreting form for Boston dormitory floors,*. p45 — Dec 14
Aluminum bridge goes into place in Long Island,*. p43 — Dec 21

AMERICAN Associations, Societies etc. – see subject

ANCHORS, see: BOLTS

APARTMENTS, see: BUILDINGS

ARCHES, see BRIDGES; CONCRETE; DESIGN; LUMBER; ROOFS; STEEL

ARCHITECTS, see: ENGINEERING

ARCTIC CONSTRUCTION, see: FROST

ASPHALT, see also: PAVING
Foamed asphalt for Minneapolis parking,**. p30 — Aug 3
Federal jury investigates possible price fixing. p57 — Aug 3
Industrial Asphalt Inc of L.A. buys 20 pavers in one order. CW p15 — Sep 28
Heavy duty paving in Kansas,**. p38 — Oct 26
Charges against Florida asphalt paving supply companies. CW p17 — Nov 23
Asphalt plant has ground controls,*. NP p123 — Dec 21

ASSOCIATED GENERAL CONTRACTORS, see: CONTRACTORS

ASSOCIATIONS, see subject, e.g.: ENGINEERING; HIGHWAYS

ATOMIC ENERGY, RADIATION, see also: POWER
Pacific Gas & Electric Co. to build Bodega Bay plant, Cal. CW p17 — Jul 6
AEC construction bill breezing through Congress. WO p19 — Jul 20
Brighter A-power future. RC p10 — Jul 27
AEC money bill moves ahead; Hanford reactor*. p20 — Jul 27
Boiling water reactor built at Humboldt Bay, Calif,*. p24 — Aug 24
Resumed A-tests will lead to Alaska blast. WO p39 — Sep 21
AEC will get all construction money, including Stanford, except Hanford. WO p39 — Sep 21
Electricians in Netherlands locate conduit obstruction with radiation monitor. p130 — Sep 21
Stanford electron accelerator nears start. WO p17 — Sep 28
USA and USSR discuss plans to build jointly world's largest accelerator. CW p17 — Oct 12
Labor gives Yankee nuclear plant a good start,*. p119 — Nov 16
Radiation shielding doors grow in size and cost,*, diags. p50 — Nov 23
Shaky start for plowshare's explosion program CW p17 — Dec 14

AUDITORIUMS, see: BUILDINGS

AUGERS, see: EQUIPMENT, Drills

AUTOMATION, see: ELECTRONICS

AWARDS, SCHOLARSHIPS, see also: EDUCATION
AISC awards prizes to most beautiful steel bridges,**. p24 — Sep 28
ENR editor takes hwy journalism award. p25 — Oct 12
Maine's hwy gets beauty award,*. p29 — Oct 19
A. A. Raymond award goes to R. L. Kondner. p28 — Nov 30
Bridge redesign wins welding contest award in Ohio. p28 — Nov 30
DEW line contractors receive Certificates of Appreciation from Army,*. p26 — Dec 7

B

BEACH PROTECTION, see: SOIL MECHANICS

BEAMS & COLUMNS, GIRDERS, TRUSSES; FRAMES
Promotion and testing of the delta girder section. RC p8 — Jul 6
Steel trusses carry parking decks across PNYA Bus Terminal roof,**, diags. p32 — Jul 13
How to preflex high-strength beams, diags. RC p8 — Aug 3
Prestressed girders for Seattle viaduct,**. p34 — Aug 24
Extend spans to decrease costs: new fabricating of structural steel beams,*. p91 — Sep 21
Rail cart for positioning pre-cast concrete beams,*. p54 — Oct 19
Counterweighted beam lifts, balances wall panels,*. NP p60 — Oct 19
Composite beam patentee foregoes royalties to promote stud-type shear connectors. p25 — Nov 23

BIDS, see project in question; see: CONTRACTS & BIDS

BITUMINOUS CONCRETE, see: ASPHALT; PAVING

BLASTING, see: EXPLOSIVES

BOLTS AND RIVETS, ANCHORS
Rock bolts hold steel drapes to guard Colorado twin tunnels,**. p30 — Sep 14

BONDS, see project in question; see also: CONSTRUCTION, Financing; STATE LEGISLATION

BOOK REVIEWS
On Thermonuclear War, by Herman Kahn. p64 — Aug 10
Structural Engineering for Professional Engineers' Examination, by Max Kurtz. p64 — Aug 10
Prestressed Concrete Design and Construction, by James R. Libby. p64 — Aug 10
1301 Review Problems from EIT and Engineering Registration Examinations. p64 — Aug 10

(Continued)

(Continued)

Industrial Districts Restudied, by R. E. Boley. p77 Aug 17
Manual of Lathing and Plastering, by J. R. Diehl. p77 Aug 17
Fluorescent Lighting Manual, by C. L. Amick. p80 Aug 17
Frame Analysis, by A. S. Hall and R. W. Woodhead. p80 Aug 17
Engineering Management and Administration, by Val Cronstedt. p60 Aug 24
Theory of Elastic Stability, by S. T. Timoshenko and J. M. Gere. p151 Sep 21
Elementary Statics of Shells, by A. Pflueger. p151 Sep 21
Advanced Design in Structural Steel, by J. E. Lothers. p151 Sep 21
Landscape Architecture, by J. Ormsbee-Simonds. p152 Sep 21
*Design Charts for Open Channel Flow, publ by BPR. p64 Oct 19
Design and Construction of Ports and Marine Structures – by Alonzo de F. Quinn. p72 Nov 2
American Building Art – The Twentieth Century – by C. W. Condit. p79 Nov 16
Design of Structures to Resist Nuclear Weapons Effects – ASCE manual. p133 Dec 21
Architecture Today and Tomorrow – by C. Jones. p133 Dec 21

BREAKWATERS, see: PORTS AND HARBORS; DAMS

BRICKS, TILES, MASONRY
Roof tiles convert wasted space to serviceable area. NP p45 Jul 6
Brick clamp helps mason spread mortar uniformly,*. NP p58 Aug 17
British research unit develops king size brick. p59 Nov 2

BRIDGES
Plans for longest bridge in the world in Buenos Aires. CW p15 Aug 3
Stenderizing trims bridge pier costs, diag. p37 Sep 7
Most beautiful steel bridges,**. p24 Sep 28
Prestressing steel stringers reduces bridge weight by 25%,*, diag. p32 Oct 19
Draw spans for emergencies only,*. p35 Nov 9
New electric drive improves control of movable bridges,*, diag. p36 Dec 14
Bridge design may go orthotropic,*. p44 Dec 21

• American

California
San Pedro – Terminal Island suspension bridge unit prices. p63 Jul 13
San Diego Bay bridge to Coronado may be built, map. p25 Aug 24
Rapid transit for Golden Gate Bridge. p21 Aug 31
Precast trestle unit prices. p116 Sep 21
San Mateo double deck bridge will cost $64m. p21 Sep 28
Trains for Golden Gate Bridge? CW p17 Oct 5
Who is right on Golden Gate rapid transit? CW p17 Oct 26
Beauty vs economy on San Mateo-Hayward Bridge design. CW p17 Dec 14
San Francisco will select Golden Gate study group. p23 Dec 14
San Mateo-Hayward Bridge: orthotropic plate girder design proposed,*. p44 Dec 21

Colorado
Denver new jet runway rolls over hwy, railroad and creek,**, diags. p52 Nov 16

D.C.
All-welded steel bridge spans the Potomac,**, diags. p32 Nov 30

Florida
Steel and concrete structure will replace timber of Shands Bridge, St. Johns River,*. p35 Nov 9

Iowa
Prestressing steel stringers reduces Des Moines bridge weight,*, diag. p32 Oct 19
Sioux City bridge unit prices. p91 Oct 19

Kentucky
Renewing deck of Cumberland Lake Bridge,**. p26 Sep 7

Maryland
Steel forms fold and roll for concrete bridge in swamp on Baltimore's Jones Falls Expressway,*. p61 Jul 20

Minnesota
St. Paul under traffic railway bridge raising unit prices. p104 Dec 21

New York
Fort Wadsworth, Fort Hamilton – and the Narrows Bridge. e p96 Jul 6
Giovanni da Verrazano and the Narrows Bridge. RCs p6 Aug 10
Concrete drivers strike hits builders of Narrows Bridge. CW p17 and p79 Aug 24
Army man defends Fort land swap for Narrows bridge. RC p8 Oct 12
First steel placed for Narrows Bridge tower. CW p17 Oct 12
Hwy bridge spans Cannonsville Reservoir, unit prices. p51 Dec 7
Amityville, Long Island, erects aluminum bridge,*. p43 Dec 21

Ohio
Timber deck bridges unit prices. p57 Oct 5
Stadium and hotel proposed on Cincinnati bridge. CW p19 Nov 16
Bridge redesign wins welding contest award. p28 Nov 30
Railroad overpass surfaced with bituminous mixture,*. p115 Dec 21

Oregon
Daring method builds truss spans of spectacular Thomas Creek Bridge,*. p23 Aug 17

Pennsylvania
Monongahela Bridge link closed at Brownsville,*. p23 Dec 14

South Carolina
Concrete slab bridge on prestressed piles unit prices. p100 Dec 21

South Dakota
Old truss bridge at Pierre to be sold for building motel? CW p19 Nov 16

Tennessee
TVA concrete bridge unit prices. p88 Nov 16

Virginia
Giant machines for deep water work at Chesapeake Bay crossing,*. p24 Jul 6
Name confusion: Chesapeake Bay Bridge and Chesapeake Bay Bridge–Tunnell are too near. RC p6 Aug 10
Chesapeake Bay Bridge–Tunnel will be official name. CW p17 Oct 26
Chesapeake Bay Bridge–Tunnel is a complex job,**, map. p32 Nov 23

Washington
Hood Canal floating bridge nears completion,**. p36 Jul 13
Special rigs speed prestressed viaduct job in Seattle,**. p34 Aug 24
Pontoon cable snaps on Hood Canal Bridge. CW p15 Aug 31

Wisconsin
Welded steel frame for Milwaukee Expressway overpass,**, diag. p36 Sep 14

• Foreign

Argentina
Plans for world's longest bridge across River Platte to Uruguay. CW p15 Aug 3

Canada
Electric drive improves control of single leaf bascule at Wallaceburg, Ont,**, diags. p36 Dec 14

Germany
Viaduct prestressed two ways beats traffic in Munich,**. p26 Aug 3
Large bridges part of West Germany's construction boom. p37 Aug 10

Great Britain
Three-way prestressing builds a London viaduct: Hammersmith Flyover on tapered piers,**, diags. p48 Jul 20
Talks proposed for English Channel link. p24 and e p80 Aug 31
Medway Bridge in Kent with largest concrete clear span sets new world mark,**, diags. p34 Aug 31
British and French study Channel link, map,*, diags. p21 Nov 30

Greece
Athens-Salonika railway bridge built in 1948 used recent Oregon technique,*. RC p10 Sep 14

Japan
Cable work starts on Wakato Bridge, longest suspension span in the Orient. p46 Jul 27

Mexico
Bridges on new rail line to the Pacific,*, map. p30 Dec 14

• Venezuela
Prestressed concrete spans Lake Maracaibo,**. p32 Oct 12

Yugoslavia
Concrete rail and hwy bridge over the Danube at Novi Sad,*. p44 Dec 7

BUDGET, see: CONGRESS; CONSTRUCTION, Financing; DEFENSE; PUBLIC WORKS

BUILDING CODES AND LAWS, see also: CITIES; FIRE; STANDARDS; ZONING
Wilmington, Del., contractors lax in obtaining bldg permits. CW p17 Jul 6
Houston may get building code. CW p17 Aug 10
Engineer bar in Denver code may get court test. p28 Aug 17
For shelters: code changes. e p80 Aug 31
Code changes to permit home shelters; no windows, one entry; non-electrical ventilation RC p37 Sep 21
First major revision of NYC code since 1938. CW p17 Oct 5
Portland Cement Asso. issues manual on earthquake resistance in tall bldgs, diags. p36 Oct 5
Code switch halts work on Oregon hotel. p25 Oct 12
Japan to institute new code after landslides,*. p50 Oct 19
Building code and zoning changes will result of Los Angeles fire. CW p19 Nov 16
Attempt to wreck St. Louis' modernized bldg code. CW p17 Nov 23
Code changes ahead for steel and concrete. p25 Dec 7
Other side of the coin: bldg officials must show some conservatism on codes. e p84 Dec 14
Prestressed Concrete Institute code requirements. CW p37 Dec 21

BUILDINGS, see also: CITIES; HOUSING; ROOFS; WALLS
Noise and vibrations completely controlled at Dallas radio and TV station,**. p44 Jul 13
U.S. cities build new skyscrapers, table of new giants. p21 Jul 20
Canada's largest tops out,*. p22 Jul 20
Tall bldgs in West Germany,**. p32 Aug 10
Norfolk, Va has new bldgs,**. p39 Aug 17
Bldg projects on air right sites in NYC and Chicago. CW p17 Aug 24
Two glass enclosed tower bldgs for London planned,*. p44 Aug 24
Lateral bracing, shear walls, diamond bracing for L.A. quake proof office,*. p31 Aug 31
New facade and addition to old Dallas skyscraper,**. Where the bldg $ goes: analysis. p100 Sep 21
Skyscraper cost components in NYC, tables. p106 Sep 21
Big bldgs along L.A.'s Wilshire Blvd,**. p28 Sep 28
Underpinning supports walls, columns, earth for N.J. brewer's bldg,**. p40 Sep 28
New concept in building: foamed plastic. e p72 Sep 28
Earthquake resistance in tall concrete bldgs, diags. p36 Oct 5
Massive Chicago church moved to new site,**. p30 Oct 12
Unusual glass enclosed office in Florida,*. p30 Oct 19
New bldgs in Jacksonville, Fla,**. p30 Nov 16
Bldg Research Institute emphasizes construction for the nuclear age. p24 Dec 7
Novel bldgs reach erection mileposts,**. p24 Dec 14
Where the building dollar goes. p91 Dec 21

• Apartments, Hotels, Restaurants
14 story motel in Columbus, Ohio, has circular tower,*. p24 Jul 27
Revolving restaurant in Cairo tops Africa's tallest tower,*. p46 Jul 27
Tower for air conditioning units in Houston hotel,*, diag. p42 Aug 3
Tokyo's tourist boom generates hotel boom,**. p30 Sep 7
Chicago's Marina City apts: climbing crane casts core,*. p26 Sep 14
Lakefront Plaza and Illinois Center will rise over rail tracks in Chicago,**. p34 Sep 14
Wilshire Blvd, L.A. has new glamorous apts,**. p28 Sep 28
Code switch halts work on Portland Hilton Hotel, Oregon. p25 Oct 12
Plans for $4.7billion housing using air rights over NYC's public facilities. p92 Nov 2
Hotel in Cincinnati, motel in Pierre, S.D., proposed on bridge. CW p19 Nov 16
Prestressed Y-shaped apt and a Hilton Hotel will rise in Honolulu,*. p29 Nov 16
William Tabler – hotel designer,**. p42 Nov 30
Casting three stories a week for Prevost House apt, NYC,*. p23 Dec 7
*Marina City central core tower completed. p25 Dec 14

• Churches and Convents
North Dakota convent has economic electric heating,**. p41 Aug 24
Heavy church in Chicago moved to make way for hwy,**. p30 Oct 12
East Meadow, N. Y., Temple Emanuel prefab shallow dome is lifted,*. p39 Dec 14
*Milan's famous Duomo. p109 Dec 21

• Culture, Entertainment, Meetings, Sports (for the World's Fair, see also: CITIES, New York)
Third bldg in NYC's Lincoln Center for Performing Arts announced,*. p26 Jul 6
St. Louis down town stadium project gets loan offer. p81 Jul 13
Montreal ice rink has heating for spectators,*. p55 Jul 20
Philadelphia's mayor has new plan for Phillies stadium. p20 Jul 27
Multipurpose structures, exposition-sports center, go up all over the U.S.,**. p19 Aug 3
New Madison Square Garden on Pennsylvania's site in NYC,*. p19 Aug 3
Biggest aluminum dome for Detroit "Showcases". RC p10 Sep 7
Build University of Africa instead of saving Abu Simbel Temples. RC p10 Sep 14
Light roof for Czech skating arena near Prague,*. p41 Sep 14
Let's not waste money on saving Abu Simbel Temples. RC p8 Sep 28
Esthetics vs. economics on Abu Simbel Temples. RC p10 Oct 5
Huge dome for assembly hall, Univ. of Illinois,**. p30 Oct 5
Alligator-jaw steel bents make D.C. stadium frame,**. p40 Oct 12
Labor Palace at Turin exposition is made of 16 umbrellas,**. p46 Nov 16
Redesigning underdesign of Birmingham stadium grandstand trusses. CW p17 Nov 30
Pier Luigi Nervi designs Dartmouth College fieldhouse,*. p26 Nov 30
* Timber arches roof Alumni Coliseum in Kentucky. p24 Dec 14
San Diego theater, Indiana auditorium, domes formed on ground and raised,**. p38 Dec 14

• Federal, Municipal, State
National Guard Armory, Savannah, Ga, uses plastic design for steel frame,* p62 Jul 20
Repairs for beams at Phila Police bldg. CW p17 Aug 24
GSA gets $212m contract, table; Customs Court in NYC, Denver bldg,**. p21 Aug 24

(Continued)

(Continued)

National Bureau of Standards labs started in Md,*. p24 Sep 14
York resumes on Phila's precast police bldg. p48 Sep 21
Oxnard jail, Calif, will make good fallout shelter. CW p21 Oct 19
Projecting glass wall cuts solar heat for Municipal office, Norfolk, Va,*. p24 Nov 23

• Garages
Caissons dig out garage basement for Geneva bldg, Switzerland,*, diags. p42 Jul 6
• Parking garage in Houston. p35 Jul 20
Boston underground garage to double as shelter. p25 Oct 5
Heliport tops Oakland parking garage, Calif.,*. p30 Oct 19
Boston Common underground garage runs into difficulties. CW p17 Nov 30

• Hangars
Corpus Christi hangar has hyperbolic paraboloid roof,*. p29 Oct 19
Steel frame hangar fails in Oneida County Airport. p24 Nov 23

• Homes
June home starts best since Dec. 1959. p68 Jul 27
Detroit home pioneers with aluminum posts and joists,*. p24 Sep 7
Steel prefabs offer variety. NP p59 Oct 19
Steel framing cuts costs for three California homes,**. p32 Dec 7

• Hospitals
Clover leaf plan: circular wings on rectangular core improve efficiency,*. diag. p47 Nov 2
Discussion of clover leaf hospital design. RCs p8 Nov 16
Round unit added to Calif hospital,*. p46 Dec 21

• Incinerators
Big incinerator rigged to handle bulky trash. NP p45 Aug 13

• Industrial plants, parks, sites
Sociology of site selection. RC p8 Jul 13
Standard prestressed tank makes Crom Corp. new shop in Gainesville, Fla.,*. p26 Jul 20
Erection methods blamed for collapse of Harrisonburg factory, diag. p22 Aug 3
Chicago meat-packing plant: aluminum wall panels for cold rooms,**. p33 Sep 14
Capital spending abroad and domestic capital outlays, tables. p80 Sep 14
Underpinning supports walls, columns, earth for Ballantine's Newark bldg,**. p40 Sep 28
Industrial Building Congress hears about prestressed steel. p24 Oct 5
Sandwich panel walls for electronics plant in Bellevue, Wash,*. p48 Oct 12
Industrial bldgs in a class by themselves. e p140 Oct 19
Industry's capital spending plans for 1962, table. p23 Nov 9
Armstrong Rubber factory, Calif, cheaper and lighter thanks to A36 steel,**. p30 Nov 9
Haverstraw, N.Y. small factory steel frame fails. p24 Nov 23
Plant and equipment expenditures rise, table. p71 Dec 14
Michigan steel plant costs cut through prepainted steel conduit. p118 Dec 21

• Laboratories, Research, Libraries
Test facilities for Aeronautics and Space Administration are expanding. WO p17 Aug 3
National Bureau of Standards labs will be diversified,*. p24 Sep 14
Aeromedical research bldg at Oklahoma: costs analyzed,*. p118 Sep 21
Variable pressure system sweetens laboratory air, Koppers Co., Pa. p27 Oct 5
Labs in Los Angeles medical center,*. p25 Oct 12
MIT research center started. p29 Nov 16
Precast service openings speed lab changes in Temple University Medical Research Bldg. p39 Nov 30

• Offices
Caissons dig out garage basement for Geneva, Switzerland, office,*, diags. p42 Jul 6
Royal Bank of Canada, Place Ville Marie, Montreal, will be Canada's largest,*. p22 Jul 20
Humble Oil bldg is Houston's tallest; dry foundation work in 34 ft of water,**. p44 Jul 20
Chicago's Union Station slated for $200m office complex,*. p21 Jul 27
Hiram Walker bldg, Toronto, will have sheer glass curtain walls. p47 Jul 27
American Cement HQ in Los Angeles: concrete crosses carry bldg loads,**. p46 Aug 17
Mexico City office has floors hung from roof tresses,*. p54 Aug 17
Consolidated Gas Bldg, Detroit: precast "lollipop" concrete panels,**. p32 Aug 24
Three stage lateral bracing for quake defense, Pacific Telephone bldg, Los Angeles,*. p31 Aug 31
Engineering Center moves to UN Plaza in NYC,*. p23 and e p84 Sep 7
New facade and addition to Dallas 1906 skyscraper,**. p32 Sep 7
Wilshire Blvd, L.A. draws new bldgs,**. p28 Sep 28
Glass curtain encloses Cocoa Beach office, Fla,*. p30 Oct 19
Bank of Georgia, Atlanta's tallest bldg, reached 29 floors in 29 weeks,*. p44 Oct 19
Montreal plans three 51-story towers,*. p48 Oct 26
First National Bank 50 story tower will set Dallas record. p27 Nov 2
15 story tower to house New Zealand's offices in London at Pall Mall,*. p50 Nov 2
20 story tower for Hartford bank redesigned in A36 steel,*. p32 Nov 9
British firms to build highest office in Boston. CW p17 Nov 23
Metropolitan Life Insurance tower, NYC, gets face lifting,*. p23 Nov 23
Twin towered First Federal Bldg planned for Detroit. p24 Nov 23
RCA's Wall Street-bldg gets 29 stories added and two tall neighbors,*. p25 Nov 23
Calif. Federal Savings in Los Angeles to be 28 stories high. CW p17 Dec 7
Manchester insurance bldg is Britain's tallest,*. p44 Dec 7
Conical Savings and Loan Asso. completed in St. Petersburgh, Fla. p24 Dec 14
PanAm over Grand Central tracks reaches midheight. p24 Dec 14
Heating system cuts cost for Huntington, Ind., publishing and printing office. p118 Dec 21

• Prefabs
In defense of prefab. RC p8 Jul 13
Defending prefab structures. RCs p8 Aug 24
US Steel's factory manufactured homes to use adhesive instead of nails. CW p37 Sep 21
Steel prefabs offer variety. NP p59 Oct 19
British aluminum prefabs hit by corrosion. p50 Nov 2
Trailer construction camp follows jobs,*. p116 Dec 21

• Schools
Federal aid still up in the air. WO p19 Jul 6
School bill action expected through threat to impact area. p23 Jul 27
School work rates "A" for combating unemployment, table. p59 Aug 3
Circles and hexagons make compact schools,*, diag. p28 Aug 24
Underground school built in New Mexico; unit prices. p68 Aug 24
Democrats still fight for school aid. WO p17 Aug 31
Build University of Africa instead of saving Abu Simbel Temples. RC p10 Sep 14
Federal aid for impacted areas. CW p37 Sep 21
The impact of school construction employment and business, tables. p108 Sep 21
Univ. of Illinois new Chicago campus will be a $150m project. p23 Sep 28
DeKalb County, Georgia, cuts costs for quality schools,*. p34 Oct 26
School districts can't afford shelters. CW p19 Nov 16
School districts can't afford shelters. CW p19 Nov 30
Plywood deck forms heat ducts for Calif school,*. p39 Nov 30
College dormitory in Boston: lightweight beams cut flooring costs,*. p45 Dec 14

• Shelters, see also: DEFENSE
Corps will make shelter survey,*. p19 Jul 27
Credit due to Office of Civil Defense for shelter designs. e p76 Aug 3
Shelter survey starts with instruction. WO p19 Aug 10
Congress buys shelter survey. p28 Aug 17
Nonprofit corporation to build cooperative radiation shelters in Calif. p26 Aug 24
For shelters: code changes. e p80 Aug 31
City of Eudora, Ark., digs hole for shelter free if residents build. CW p15 Sep 7
Underground shelters in nine schools. WO p17 Sep 7
Bldgs selected to provide shelter areas. CW p15 Sep 28
Shelter program stirs confusion,**. p19 Sep 28
Spending for fallout shelters will total $200 billion in 20 yrs — if we're still around. CW p17 Oct 5
Shelters need more thought. e p94 Oct 5
Shelter for every backyard at $100? WO p19 Oct 12
Federal Trade Commission to watch shelter ads. CW p17 Oct 26
Family fallout shelters draw mixed reaction. WO p19 Nov 2
Hwy approach ramps seen as shelters,*. p25 Nov 2
Looking for a place to hide: shelter survey will have 1000 A-Es,*. p21 Nov 9
School districts can't afford shelters. CW p19 Nov 16
Fallout shelters bill passes in New York. p26 Nov 16
Los Angeles storm drains unfit for shelters. p26 Nov 16
Filter foils fallout, germs, gas in Chemical Society's Washington shelter. p26 Nov 16
Some protection vs none. RC p12 Nov 23
Engineers and counsel on shelters. e p92 Nov 23
Atlanta proposes code of ethics to govern shelter jobs. CW p17 Dec 7
Kennedy Administration gets definite on shelters. p21 Dec 7
FTC rules on A-bomb shelters advertising. WO p19 Dec 14
FHA announces details of fallout shelter loans. p27 Dec 14
Family shelters fallacies. e p84 Dec 14
Shelter sutvey contracts go out. CW p37 Dec 21
Pentagon plans $500 million shelter aid. p45 Dec 21

• Shops
Birmingham, Alabama, shopping center: packaged heat pumps cool mall,*. p49 Aug 10
Five supermarkets planned in Buenos Aires. p55 Aug 17
Los Angeles Japanese department store,*. p26 Oct 5

• Storage, Warehouses, Tanks, Silos, see also: RESERVOIRS
Precast panels make a prestressed water tank in Illinois,**. p52 Aug 24
Montgomery-Ward Texas warehouse: foamed concrete fill pumped to make roof. p53 Aug 24
Cost estimating "erector set" for warehouses,**, tables, graph. p95 Sep 21
Warehouse unit costs analyzed, table. p98 Sep 21
Stacked forms speed Pittsburgh warehouse erection,*. p46 Oct 12
Corrosion wrecked prestressed tank in Owl's Head treatment plant last April,*. p23 Nov 2
Steel water tank falls in Jackson, Miss. p25 Nov 23
Boring rig helps in tough foundation job for Montreal grain elevator,**. p36 Nov 30
Peaked, column free Oklahoma grain warehouse consists of trussed rafters,*. p45 Dec 14
Chimney rise through water tanks in Great Britain,*. p109 Dec 21
Pneumatic storage offers glass walls, truck doors, folds easily. NP p123 Dec 21

• Terminals, Stations
Steel trusses carry parking decks across PNYA Bus Terminal roof,**, diags. p32 Jul 13
Big bonus won on completion of O'Hare twin terminal bldgs, Chicago. CW p15 Sep 7
How Malan won the big bonus on O'Hare terminal,**. p23 Sep 14
Prestressed T-beams form Phoenix air terminal roof,*. p46 Sep 21
Las Vegas air terminal to have three intersecting domes. p27 Oct 5
Los Angeles has jet parking around terminal bldgs,**, diag. p34 Oct 19
Naples has modern rail terminal,*. p49 Oct 19
Detroit will get new airport terminal. p26 Nov 2
La Guardia terminal work halted through defective piles. p22 Nov 9
Northwest-Northeast-Braniff terminal at Idlewild can load ten planes,*. p44 Nov 23
Pittsburgh Greyhound bus terminal,*. p54 Nov 23

• Towers, Stacks, see also: RADAR; TELEVISION
Africa's tallest tower in Cairo has revolving restaurant,*. p46 Jul 27
Helicopter shuttles concrete to build Calif transmission towers,*. p42 Sep 14
Aluminum and steel combine to make new type high voltage towers. p42 Sep 14
TVA's Paradise stack reaches 600 ft,*. p24 Nov 30
TVA to wreck high stack. CW p17 Dec 14
Chimneys rise through water tanks in Great Britain,*. p109 Dec 21

BUREAU OF PUBLIC ROADS, see: HIGHWAYS

BUREAU OF RECLAMATION, see: RECLAMATION

C

CAISSONS, COFFERDAMS, see also: BRIDGES; DAMS; PILES; PORTS
Caissons dig out garage basement for Geneva bldg, Switzerland,*, diags. p42 Jul 6
Reactor tank sunk to become foundation for bldg,*. p24 Aug 24

CANALS, CHANNELS, see also: RIVERS
Florida still tries on cross state barge canal. CW p15 Sep 28
Search for cheap canal linings,**. p34 Sep 28
Canal planned to cut Thailand peninsula. CW p37 Dec 21

CAPITAL SPENDING, see: BUILDINGS, Industrial plants; EQUIPMENT

CAUSEWAYS, see: BRIDGES

CEILINGS, see: FLOORS AND CEILINGS

CITIES, see also: BUILDINGS; HOUSING; ZONING
Urban renewal work goes from planning to building. p81 Jul 13
Kentucky gets first urban planning grant to help 47 cities. CW p17 Jul 20
New Towns in Great Britain,**. p42 Jul 27
Area-aid program starts moving. p57 Aug 3
Federal aid, housing codes, urban renewal. RC p6 Aug 10
Senate Committee supports bill to create Dept. of Urban Affairs. WO p19 Aug 17
Federal funds spur local plans, graph, table. p19 Aug 31
U.S. backs coordinated planning for hwys and urban development. p63 Aug 31
Aid to depressed areas pick up momentum. p260 Sep 21
Bill to create Dept of Urban Affairs and Housing faces tough sledding. WO p17 Sep 28
ASCE convention looks at the City of 1980,*. p21 Oct 26
Accent on conservation in city planning. p24 Oct 26
Urban hwys must be improved. p25 Oct 26
Taxes and urban growth. e p100 Oct 26
Cabinet publicizes urban construction work. WO p19 Nov 2
Roads and urban planning. e p106 Nov 2
Federal aid program for urban transit studies. WO p19 Dec 7
Unusual suburban utilities policy as areas readied for annexation. p26 Dec 14
Municipal Associations wants $1.75 billion transit program. WO p39 Dec 21
Gains for conservation. e p224 Dec 21

Atlanta, Ga
Rapid transit will serve 5 counties, map. p21 Sep 7

Baltimore, Md
Charles Center redevelopment project starts,*. p104 Jul 20

Berlin, Germany
West Berlin stockpiles construction materials, ready for blockade. p24 Aug 10

Boston, Mass
British firms to build highest office. CW p17 Nov 23

Chicago, Ill
American-British interests to develop Union Station,*. p21 Jul 27
Developers plan big use of rail air rights,**. p34 Sep 14

Denver, Colo
Engineer bar in code may get court test. p28 Aug 17

Gasville, Ark.
Gets loan and grant under area program. p57 Aug 3

Houston, Texas
Loose rein for growth. ENR's "Fitting cities to the future" report,**, maps. p28 Jul 20
May get a building code. CW p17 Aug 10
Architects omitted in July 20 story. RC p12 Sep 21

Jacksonville, Fla
Fitting cities to the future: Jacksonville helps itself to growth,**, map. p30 Nov 16

Leadville, Colorado
Strikes warm water,*. p41 Oct 19

London, England
New Towns win approval of Old Great Britain,**. p42 Jul 27
Two glass enclosed tower bldgs planned,*. p44 Aug 24

Los Angeles, Cal.
Architects get $1.4m for plans – but bldgs are not built. CW p17 Jul 20
Wants U.S. loan for transit. p22 Aug 10
Fitting cities to the future ENR report: big bldgs on Wilshire Blvd,**. p28 Sep 28
and correction RC p8 Nov 9
Building code and zoning changes will result from fire. CW p19 Nov 16
Storm drains unfit for shelters. p26 Nov 16
Alweg Monorail makes firm rapid transit proposal. CW p17 Nov 23
Race for height record continues. CW p17 Dec 7
Alweg Monorail proposes rapid transit system. p23 Dec 7
Rejects monorail transit proposal. p46 Dec. 21

Mayville, N.D.
Jumps half century overnight: crash public works program,*. p56 Aug 3

Memphis, Tenn
City helps state on federal-aid hwy job. p59 Sep 28

Mexico City, Mexico
Commissions sent to Disneyland and Italy to study elevated monorails. CW p17 Jul 6

Milan, Italy
Subway excavation begun in front of the Duomo,*. p109 Dec 21

Montreal, Canada
New office bldgs vying for tallest-in-town label. CW p17 Jul 20
More on high bldgs. CW p15 Jul 27
Office complex to start: 3 51-story towers,*. p48 Oct 26
Subway construction to start. p25 Nov 2
Westmount builds big snow melter,*. p41 Nov 9

New York, N.Y.
Sorry atmosphere of corruption in Board of Education. CW p17 Jul 6
Lincoln Center announces plans for NYState Theater,*. p26 Jul 6
Forts fortified: Wadsworth on Staten Island and Hamilton in Brooklyn gain by Narrows Bridge. e p 96 July 6
New zoning widens city canyons,*. p111 Aug 17
Worlds Fair exhibit bldg to have air walls,*. p23 Aug 24
Skyscraper cost components. p106 Sep 21
Heliport will top PNYA exhibit at World's Fair,*. p22 Sep 28
First major revision of bldg code since 1938. CW p17 Oct 5
Electrion campaign spawns $4.7billion housing idea. p92 Nov 2
Board of Education appoints construction monitors. CW p17 Dec 7
Water tunnel planned, another awarded. p27 Dec 14
Pedestrian mall in midtown Manhattan is an imaginative proposal. e p84 Dec 14

Norfolk, Va
Fitting Cities to the Future ENR report: Norfolk builds for the big move from Back Street to Main Street,**, maps. p32 Aug 17

Philadelphia, Pa
Suburban counties join in transit plan. p26 Aug 24
Elevated transit system counts faults by hundreds. p27 Nov 2
Methods of letting public works contracts change. CW p17 Nov 9
$100m City Hall West Plaza project proposed. p206 Dec 21

Phoenix, Ariz
The housing code and urban renewal. RC p6 Aug 31

Prague, Czechoslovakia
Letter from Prague: world conference on concrete durability. p43 Nov 9

St. Louis, Mo.
Attempt to wreck modernized bldg code. CW p17 Nov 23

San Diego, Cal
Fires City Manager, George Bean. CW p15 Sep 28
Center City project sparks other jobs,*. p25 Oct 5

San Francisco, Cal
Rapid transit plans get severe setback. CW p15 Aug 3
Red Rock Hill developers limited to prize winning designs. p24 Aug 3
Transit plans ready,*, map. p21 Aug 10
Rapid transit for Golden Gate Bridge. p21 Aug 31
No trains on Golden Gate Bridge. p26 Sep 14

Springfield, Oregon
Housing codes and urban renewal. RC p6 Aug 10

Tokyo, Japan
Tourist boom generates hotel boom,**. p30 Sep 7

Washington D.C.
Transit agency calls for ideas. p21 Sep 7
Victory for hwys in rapid transit vs. freeway battle. WO p21 Nov 16
Curved walls planned for Foggy Bottom project, p26 Dec 7

Wilmington, Del.
Contractors lax in obtaining bldg permits. CW p17 Jul 6

Winston-Salem, N.C.
Suburban areas readied for annexation, unusual utilities plan. p26 Dec 14

COATINGS, see: ADHESIVES, COATINGS

COLUMNS, see: BEAMS & COLUMNS; CONCRETE; STEEL

COMPUTERS, see: ELECTRONICS

CONCRETE, see also: PAVING
Epoxy resin for concrete repairs at Columbia River dams,**. p44 Aug 17
American Cement HQ is showcase for dramatic uses of concrete,**. p46 Aug 17
Concrete bearing stress in Harrisonburg bldg. RC p10 Sep 7
Earthquake resistance in tall concrete bldgs, diags. p36 Oct 5
World views on concrete durability at Prague RILEM conference. p43 Nov 9
Lightweight frame for Pittsburgh bus terminal,*. p54 Nov 23

• Additives, Aggregates
Graphical method simplifies economical blending of aggregates, charts. p134 Sep 21

• Cement
Industry agrees to wage boost. p59 Aug 3
ASTM C-1 Committee: step in the right direction. RC p6 Oct 19

• Finishing
Floor operated grinder finishes concrete ceilings. NP p50 Jul 13
Bump cutter gives Navajo Dam spillway a close shave,*. p113 Dec 21

• Forms
Invert and arch forms at Denver water tunnel lining job,**, diags. p40 Jul 6
Steel forms fold and roll for Maryland's concrete bridge in swamp,*. p61 Jul 20
Toronto subway job: form collapse laid to improper bracing,*, diags. p26 Aug 10
Stacked forms fold and slide to speed work on Pittsburgh warehouse,*. p46 Oct 12
Aluminum extendable beams make floor concreting form in Boston dormitory,*. p45 Dec 14
"T" footing cutter eliminates forms for light building foundations,*. NP p49 Dec 14

• Mixing & Placing, Tensioning, Reinforcing
Concrete foam fill pumped in a hurry for Texas warehouse. p53 Aug 24
High speed mixing of cement with water before addition to aggregates may improve concrete. CW p15 Sep 7
Three concrete batchers designed for export. NP p143 Sep 21
Concreting huge dome in Illinois,**. p30 Oct 5
Casting three stories a week for NYC apartments,*. p23 Dec 7
Mobile batchers have interchangeable parts. NP p124 Dec 21

• Precast, Prestressed
Prestressed taxiways at Lemoore jet airbase, Calif,**. p24 Jul. 13
Prestressed tank makes Crom Corp. shop in Florida,*. p26 Jul 20
Precast units form backbone, three-way prestressing builds Hammersmith Flyover, a London viaduct,**, diag. p48 Jul 20
Viaduct prestressed two ways solves Munich traffic problem, Germany,**. p26 Aug 3
Prestressed precast roofs have F section,*. NP p55 Aug 10
Precast crosses unite to form grill for Los Angeles bldg,**. p46 Aug 17
Repairs for prestressed beams at Phila Police bldg? CW p17 Aug 24
Precast "lollipop" panels enclose Detroit Consolidated Gas Bldg,**. p32 Aug 24
Special rigs speed prestressed viaduct job in Seattle,**. p34 Aug 24
Precast panels make a prestressed water tank in Illinois,**. p52 Aug 24
Medway Bridge, England, will have largest prestressed span,**, diags. p34 Aug 31
Preflex for ultimate load. RC p10 Sep 14
Machine extrudes prestressed planks,*. NP p47 Sep 14
Prestressed T-beams make Phoenix air terminal roof,*. p46 Sep 21
Work resumes on Phila's police bldg after precasting and prestressing checks. p48 Sep 21
Prestressed concrete spans Lake Maracaibo, Venezuela,**. p32 Oct 12
Prestressed Concrete Institute meeting stresses fire resistance. p26 Oct 26
Corrosion wrecked prestressed tank,*. p23 Nov 2
Mr. Feld vs. prestressed concrete in corrosion failures. RC p12 Nov 16
Precast prestressed hotel and apartment house will rise in Honolulu,*. p29 Nov 16
Dartmouth College builds precast fieldhouse,*. p26 Nov 30
Comments on prestressed concrete. RC p8 Dec 14
Prestressed Concrete Institute publishes code requirements. CW p37 Dec 21

CONGRESS, ADMINISTRATION, see also: DEFENSE, HOUSING; PUBLIC WORKS
Chances for school aid down, for foreign aid up. WO p17 Aug 3
Congressional attacks on ICA for mismanagement of foreign aid hwy jobs. p24 Aug 3
Congress smiles at construction; legislation table. p21 Sep 14
Congress votes bldg millions. p22 Sep 28
House to cut "back door" spending. p23 Oct 5
Damaging exaggerations in congressional investigations of foreign aid jobs. e p92 Dec 7

CONSTRUCTION, see also: CONTRACTS; DEFENSE; ECONOMICS; ENGINEERING; PUBLIC WORKS
Naming the baby: picking the name for major structures. e p96 Jul 6
United, purposeful construction needed after Russia's blasts, e p88 Nov 9
Your child and construction: NYLife Insurance ads. e p88 Nov 9
Construction inspector: the weakest link. e p92 Nov 30
Exciting construction jobs. e p92 Dec 7

• Backlog; Put-in-place
Proposed work lifts the backlog, table. p22 Jul 13
Work backlog up, tables. p203 Dec 21

• Contracts
Awards will be up in second half of '61, graph; June table. p21 Jul 13
Table of July contracts. p73 Aug 10
August volume in heavy construction contracts tops $2.2 billion; August table. p82 Sep 14
Housing contracts gain, others decline; September table. p81 Oct 5
In private construction, commercial grows the fastest, graph. p21 Oct 12
Ten month contract volume still lags; October table. p75 Nov 9
Federal contract awards very slow, graph, table. p73 Dec 7
Contract volume continues to fall; November table. p74 Dec 7

• Cost Indexes, Costs
Monthly indexes score fourth consecutive record. p81 Jul 6
Construction costs: Excelsior! p73 Aug 10
Costs change little from August. CW p15 Sep 7
Third quarter costs roundup and outlook. pp53-128 Sep 21
Productivity: key to labor costs; constructions costs vs prices of goods. p54 Sep 21
Cost indexes: ENR, railroad and public utility. pp69-70 Sep 21
Canadian bldg cost indexes. p84 Sep 21
Alaska and Hawaii bldg costs indexes. p86 Sep 21
Cost cutting with open-web structural steel beams. p91 Sep 21
Warehouse costs estimating aid. p95 Sep 21
Basic cost factors: the 4 M's. p80 Sep 21
Costs rise slightly. p81 Oct 5
Costs rise for November. p75 Nov 9
Costs decline for December. p74 Dec 7
Fourth quarter costs roundup and outlook. pp51-104 Dec. 21
Higher material and labor costs in 1962 seen, graphs. p52 Dec 21
How prices moved in 1961, graph, table. p56 Dec 21
Prices in New York City. p56 Dec 21
Aluminum steady, copper rises. p58 Dec 21
ENR cost indexes for 22 cities, graphs table. p58 Dec 21
Wholesale price index, BLS construction materials price indexes. p60 Dec 21
Materials price changes in 22 cities. p65 Dec 21
Building cost trends by type. p82 Dec. 21

• Financing
Higher rates for money coming. p80 Sep 21
Work worth $1.2 billion on ballot for November election day. p85 Oct 26
Voters reject 61% of proposed bonds, table. p23 Nov 16
Local spending up; bonds pay bills. p24 Nov 16
Federal encroachment on private business: REA power financing. e p92 Nov 30
Money plentiful now, but may tighten, borrowing cost trends table. p77 Dec 21

• Forecasts
Commerce Dept. expects construction to hit $57.8 billion in 1961. WO p19 Jul 13
1962 forecast: $25.6 billion market; heavy construction forecast table for 1962 and 1963. p19 Sep 7
Boom predicted for 2000 with $219 billion, $107 billion in 1975. WO p23 Oct 19
Federal construction points up; $7.3 billion in fiscal 1962. p91 Nov 2
Construction spending of $60 billion predicted for next year. WO p19 Dec 7
Outlook for 1962: higher materials and labor prices, graphs. p52 Dec 21

• Foreign, see also: BRIDGES, DAMS, HIGHWAYS etc.
British Labor Party recommends construction land purchase by government. CW p17 ... Jul 6
Foreign aid bill in trouble, construction will suffer. WO p19 ... Jul 13
West Germany's construction booming,**, map. p32 ... Aug 10
New facets to foreign aid. e p92 ... Aug 10
Aid funds flow to Latin America, map. p21 ... Aug 17
Foreign aid bill meets rough House. WO p19 ... Aug 24
Honesty is the best policy on foreign aid jobs. e p92 ... Aug 24
Foreign aid bill backs overseas builders. WO p17 ... Sep 7
U.S. firms trim foreign outlays; capital spending abroad by U.S. industry, table. p80 ... Sep 14
Prices and wages around the world. p82 ... Sep 21
Canadian costs stable in 1961, prices and wages table. p84 ... Sep 21
Engineers and foreign aid; ICA becomes AID. e p94 ... Oct 5
New Development Bank moves funds into Latin America,*, map. p120 ... Oct 19
Khrushchev cancels new capital construction in Russia. p26 ... Oct 26
Korea invited foreign investments, mostly construction. WO p19 ... Nov 23
Cost of high living abroad,*. p78 ... Nov 23
Construction abroad: more loans, fewer grants is new AID policy. e p92 ... Nov 23
Foreign aid consultants: pro and con. RCs p6 ... Nov 30
Brazil gets construction aid. WO p19 ... Nov 30
Damaging exaggerations in congressional investigations of US aid jobs. e p92 ... Dec 7
Foreign aid public works architect would do a good job for the U.S. RC p35 ... Dec 21
Venezuela and Colombia get public works loans. p206 ... Dec 21

• Materials, see also: CONCRETE, STEEL, etc.
The 4 M's: lumber prices break, cement up, steel steady. p81 ... Sep 21
Materials prices around the world. p82 ... Sep 21
Materials costs, roundup and forecast, graphs, tables. pp51-108 ... Dec 21

• Materials and Labor Prices
Cement, aggregate, concrete, paving brick, block, asphalt, road oils: p59 Jul 6, p66 Aug 10, p51 Sep 7, p59 Oct 5, p61 Nov 9, p54 Dec 7.
Hourly wage rates, building board & lath, insulation: p60 Jul 6, p49 Aug 3, p49 Aug 31, p50 Sep 28, p79 Nov 2, p56 Nov 30, p74 Dec 21.
Iron and steel products; plumbing, heating, water, sewer pipe & tubing: p65 Jul 13 p87 Aug 17, p59 Sep 14, p71 Oct 12, p89 Nov 16, p57 Dec 14.
Lumber, timber, plywood; glass, explosives, piles: p78 Jul 20, p69 Aug 24, p76 Sep 21, p93 Oct 19, p62 Nov 23, p70 Dec 21.
Structural clay bldg tile, brick, lime; pait, roofing; plaster, bldg sheets: p55 Jul 27, p50 Aug 31, p49 Sep 28, p61 Oct 26, p53 Nov 30, p72 Dec 21.

• Scoreboard
Wage rates, Material prices, ENR index review: p76 Jul 6, p72 Aug 10, p67 Sep 7, p78 Oct 5, p74 Nov 9, p71 Dec 7.
ENR cost indexes, contracts awarded, new construction capital: p76 Jul 13, p107 Aug 17, p77 Sep 14, p85 Oct 12, p89 Nov 2, p117 Nov 16, p67 Dec 14.
Materials shipments; Employment and failures: p103 Jul 20, p76 Aug 24, p259 Sep 21, p119 Oct 19, p75 Nov 23, p202 Dec. 21.
Backlog: p63 Jul 27, p59 Aug 31, p57 Sep 28, p81 Oct 26, p76 Nov 30.
State and municipal bond sales; Construction machinery price indexes: p55 Aug 3.

• Unit Prices
Tennessee runway extension contract. p57 ... Jul 6
San Pedro-Terminal Island suspension bridge, Calif. p63 ... Jul 13
Arkansas hwy relocation; W.Va sewerage. p77 ... Jul 20
Utah hwy job with seven bridges. p54 ... Jul 27
New York water transmission main; Delaware hwy. p48 ... Aug 3
Nevada freeway. p65 ... Aug 10
Toronto harbor marine terminal. p85 ... Aug 17
New Mexico school goes underground; excavations for Colo hwy. p68 ... Aug 24
Virginia hwy and bridge. p48 ... Aug 31
Airlift for Hawaiian hwy; Alaskan sewer. p47 ... Sep 7
Lower Monumental lock and dam, Wash. p56 ... Sep 14
Oregon hydro tunnel. p115 ... Sep 21
Calif concrete trestle. p116 ... Sep 21
Okla civil aeromedical center. p118 ... Sep 21
Iowa sanitary sewer system. p122 ... Sep 21
Georgia bridge. p122 ... Sep 21
Ohio water main; Washington D.C. sewer. p124 ... Sep 21
Tennessee airport. p126 ... Sep 21
Timber deck bridges on Ohio road job. p57 ... Oct 5
Hwy underpass included in Texas runway extension job. p67 ... Oct 12
Sioux City bridges; Oroville dam tunnels. p91 ... Oct 19
Ohio concrete reservoir. p59 ... Oct 26
Earthfill dam in Montana. p75 ... Nov 2
Greers Ferry powerhouse. p57 ... Nov 9
Dewatering at Illinois pumping station job. p88 ... Nov 16
TVA concrete bridge. p88 ... Nov 16
Vermont hwy. p61 ... Nov 23
California freeway. p51 ... Nov 30
Diversion of Missouri at South Dakota Dam. p51 ... Dec 7
Hwy bridge spans Cannonsville Reservoir, N.Y. p51 ... Dec 7
Indiana's Hebron alters waterworks. p55 ... Dec 14
New Jersey sewers. p97 ... Dec 21
Baltimore concrete street paving. p98 ... Dec 21
Concrete slab bridge on prestressed piles in S.C. p100 ... Dec 21
St. Louis concrete runway. p103 ... Dec 21
Railway bridge raised under traffic in St. Paul, Minn. p104 ... Dec 21
Two alternates for channel deepening in Snake River. p104 ... Dec 21

CONTRACTS & BIDS, CONTRACTORS, see also: CONSTRUCTION; ENGINEERING
Top defense contractors listed. CW p17 ... Jul 13
AGC opens fire on corruption CW p17 ... Jul 20
Contractor rents watchdogs, cuts pilferage by 90% on Chicago job. CW p17 ... Jul 20
ENR's top contractor list for 1960. p24 ... Jul 20
Cleveland Building Trades Employers warn on risk of federal wage control,*. p74 ... Aug 10
Bldg contractors' bid prices rise. p69 ... Sep 21
Readability planned for Pentagon contracts. WO p19 ... Oct 5
Profit margins remain thin: how companies fared Jan-June 1961, table. p90 ... Oct 12
Wilmington bid ½ minute late, but wins job. CW p21 ... Oct 19
Two NYC contractors reinstated for school jobs. CW p17 ... Nov 2
AGC moves against corruption at Governing Board mid-year meeting,*. p21 ... Nov 2
Dunn to head AGC staff. CW p19 ... Nov 16
Controversy over "Small Business" set-asides flares hot again. p77 ... Nov 23
Roadbuilding contractors bids are lower than engineering estimates. p82 ... Nov 30
Pentagon counts builders among top firms: top defense contractors. WO p19 ... Dec 14

CONVEYOR BELTS, see: HAULING; TRAFFIC & TRANSPORTATION

CORPS OF ENGINEERS
To make shelter survey,*. p19 ... Jul 27
Less shopping for the Corps if purchases centralized in Pentagon. CW p15 ... Aug 31
Corps joins race to the Moon. WO p19 ... Nov 9

CORROSION
Failure of prestressed tank analyzed,*. p23 ... Nov 2
What stress corrosion is. p24 ... Nov 2
Corrosion hits British aluminum prefabs. p50 ... Nov 2
Lath tie failures spur ceiling studies. p26 ... Nov 9
Mr. Feld vs. prestressed concrete industry in corrosion failures. RC p12 ... Nov 16
Corrosion wrecked Owls Head sewage plant tank,*. RCs p8 ... Dec 21

COURT CASES, see: LEGAL DECISIONS

CRANES, see: EQUIPMENT, Cranes

CRITICAL PATH METHOD, see: CONSTRUCTION; MANAGEMENT

CULVERTS, see: CONCRETE; PIPES; STEEL; TUNNELS

D

DAMS, see also: POWER; RIVERS
Dam congress in Rome spotlights foundations. p26 ... Jul 13
Safety in dam design. e p128 ... Aug 17
and RC p7 ... Sep 7
Soil experts emphasize field work. p23 ... Aug 24
Four dams in new Calif hydro project on McCloud and Pit rivers. p25 ... Aug 31
New dam extension on Niagara Falls. p23 ... Sep 7
Dambuilder Harvey Slocum dies in India,*. p28 ... Nov 16
Cavernous limestone troubles dambuilders. p22 ... Nov 23
Carlo Semenza, Italy's dam builder, dies in Venice,*. p46 ... Dec 21

• American

Big Bend Dam, South Dakota
Unit prices for Missouri diversion. p51 ... Dec 7

Blue Ridge Dam, Arizona
Site must be inspected before snow falls, bidders told. p26 ... Oct 5

Boundary Dam, Pend Oreille River
Seattle gets license for $97m dam. p20 ... Jul 27

Clark Canyon Dam, Montana
Canadian contractor wins job. p23 ... Sep 28
Unit prices. p75 ... Nov 2

Fox Point Dam, Providence River
Holds back ocean, river pumped over dam. p24 ... Sep 7

Glen Canyon Dam, Colorado River
Second highest dam in the U.S. keeps growing,*. p22 ... Sep 14

Greers Ferry Dam, Arkansas
Will be finished 10 months ahead of schedule,*. p27 ... Nov 9
Powerhouse unit prices. p57 ... Nov 9

Hanson Dam, Green River, Wash.
Rockfill structure will be finished ahead of schedule,*. p24 ... Aug 31

John Day Dam, Columbia River
Spillway gates positioned between piers,*. p26 ... Nov 23

Lower Monumental Dam, Wash
[illegible] and dam unit prices. p56 ... Sep 14

Navajo Dam, New Mexico
Bump cutter gives spillway a close shave,*. p113 ... Dec 21

Oroville Dam, Calif
Tunnel unit prices. p91 ... Oct 19

Priest Rapids, Columbia River
Epoxy resin for concrete repairs on Rocky Reach and Priest Rapids,**. p44 ... Aug 17
Power produced ahead of schedule, M-C&S earns bonus,*. p21 ... Nov 23

Robert Moses Dam, St. Lawrence River
Builders will get 65% more than original estimate. CW p17 ... Sep 14

Table Rock Dam, White River
Corps to compare model and prototype data on dam. p24 ... Aug 24
Wage-hour case on dam and reservoir project. p122 ... Nov 16

Waco Dam, Texas
Shifting foundation causes trouble. CW p17 ... Oct 26
Slide laid to rock fault,*. p22 ... Dec 7

• Foreign

Africa
Safety of rock foundation at Kariba Dam. RC p7 ... Sep 7
Kariba to have an extra abutment,*. p25 ... Sep 7
Egyptians do not show gratitude to Russia for Aswan. CW p37 ... Sep 21
Kennedy opens purse to Akosombo Dam on Volta River, Ghana. p43 ... Dec 21

Great Britain
Suggestion to span English Channel with power dam topped by hwy. CW p17 ... Dec 7

Iraq
Tribesmen uprising delays Derbendi Khan Dam before winter floods. CW p37 ... Sep 21

Italy
More dams built,**, maps, diags. p30 ... Nov 2

Pakistan
Mangla Dam bids will result in highest contract ever. p25 ... Nov 23

Russia
Nourek Dam will be 990 ft earthfill; Ingouri Dam will be concrete arch. p26 ... Jul 13

Switzerland
Albigna: open-joint gravity dam,*. p57 ... Nov 16

Syria
Bid call due on big Euphrates project. p49 ... Oct 19

Viet Nam
Water projects are planned, map. p40 ... Dec 14

DEFENSE, see also: AIRPORTS; BUILDINGS, Shelters; MISSILES; RADAR
Top Defense Contractors listed. CW p17 ... Jul 13
Defense construction unchanged by Berlin. WO p17 ... Jul 27
Civil Defense in Pentagon; Corps will survey shelters,*. p19 ... Jul 27
Bureau of Yards and Docks, GSA join in Civil Defense survey. p21 ... Aug 3
Credit due to Office of Civil and Defense Mobilization. e p76 ... Aug 3
Military building bill readied. p21 ... Aug 31
BMEWS was a bargain. CW p17 ... Sep 14
Defense contracts. WO p19 ... Oct 5
OCD to engage 1000 A-E for shelter survey,*. p21 ... Nov 9
Underground fortress for NORAD at Cheyenne Mountain,**, diags. p38 ... Nov 16
Top defense contractors. WO p19 ... Dec 14

DESALTING, see: WATER SUPPLY, Treatment

DESIGN, see also: RESEARCH & TESTS; STANDARDS & SPECIFICATIONS
How to preflex high strength beams, diags. RC p8 ... Aug 3
Learning from failures. e p92 ... Aug 10
Floors hung from roof trusses make Mexico City office,*. p54 ... Aug 17
The challenge of new shapes. e p80 ... Aug 31
Slenderizing trims pier costs, diags. p37 ... Sep 7
Extend spans to decrease costs: new fabricating of structural steel beams,*. p91 ... Sep 21
Hurricane lessons. e p274 ... Sep 21
Headaches in air rights over railroads and hwys for bldgs. e p274 ... Sep 21
Housing design: not just for elderly. e p274 ... Sep 21
Earthquake resistance in tall concrete bldgs, diags. p36 ... Oct 5
Cost of new odd shapes in bldgs. RC p12 ... Oct 26
ASCE studies new data on steel, concrete and timber joints. p24 ... Oct 26
Resilience in tall frames, diag. RC p9 ... Nov 2
The origin of tiebacks. RC p9 ... Nov 2
What stress corrosion is. p24 ... Nov 2
Clover leaf plan for hospitals improves efficiency *, diag. p47 ... Nov 2
Sixteen umbrellas make Nervi's bldg in Turin, Italy,** p46 ... Nov 16
Redesigning underdesign for Birmingham's grandstand. CW p17 ... Nov 30
Curved walls for Washington's Foggy Bottom project. p26 ... Dec 7
Three domes formed on ground, raised,**. p38 ... Dec 14
Structures assembled on ground and lifted are cheaper to build. e p224 ... Dec 21

DOCKS, see: PORTS AND HARBORS

DOMES, see: ROOFS

DOORS
Radiation shielding doors grow in size and cost,**, diags. p50 Nov 23
Pneumatic storage has truck doors. NP p123 Dec 21

DRAFTING, see: EQUIPMENT, Tools and Instruments; SURVEYING

DRAWING, see: EQUIPMENT, Tools and Instruments; SURVEYING

DREDGING, see: EARTHMOVING

DRILLING, see: EQUIPMENT, Drills

DROUGHT, see: IRRIGATION; WATER RESOURCES

DRYDOCKS, see: PORTS AND HARBORS

E

EARTHMOVING, EXCAVATIONS, see also: EQUIPMENT; HAULING; SOIL MECHANICS
Manitovoc excavator works on land or sea,*. NP p55 Aug 10
Machine backfills automatically after pipelaying,*. NP p59 Oct 19
Underground fortress blasted out at Cheyenne Mountain for NORAD,**, diags. p38 Nov 16
Footing cutter attaches to Ditch Witch trencher,*. NP p49 Dec 14
Self propelled trencher cuts to 36 inches depth. NP p124 Dec 21

EARTHQUAKES, see: ACCIDENTS; BUILDING CODES; DESIGN

ECONOMICS, see also: CONSTRUCTION
Presidents backs public works to create jobs. WO p17 Aug 31
Better than a boom. e p100 Sep 14
Aid to depressed areas picks up momentum. p260 Sep 21
Alabama roadbuilders must "buy American". p25 Oct 12
Water Industries Capital Corp. proposes to sell shares. CW p21 Oct 12
New Development Bank moves funds into Latin America,*, map. p120 Oct 19
Capital spending plans for 1962, table. p23 Nov 9
Imports fight coming to a boil, "Buy-American" pressure mounts. p22 Nov 23
Controversy over "Small Business" set asides flares up again. p77 Nov 23
High cost of high living abroad,*. p78 Nov 23
Federal encroachment on private business: REA power financing. e p92 Nov 30
National Constructors Assoc. proposes Economic Council at AFL-CIO convention. p79 Dec 7
Kennedy to ask for pump-priming public works. WO p19 Dec 14
Industry's capital outlays rising, table. p71 Dec 14

EDUCATION, see also: ENGINEERING
Yale Bureau of Hwy Traffic is a unique school,**. p30 Jul 6
Educators favor pre-engineering program before civil branch. e p80 Jul 27
Bias curbed in apprenticeship. p80 Aug 24
Old engineering magazines should be sent to overseas colleges. RC p8 Oct 26
Engineering enrollments in colleges drop. p23 Dec 7

ELECTRICITY, see: POWER

ELECTRONICS, AUTOMATION
Road engineers go electronic. p22 Aug 31
Robot informs sidewalk supers at Pan Am job,*. p54 Oct 19

ELEVATORS, SCAFFOLDING, see also: EQUIPMENT
Elevator controls cuts waiting time. NP p47 Nov 9
Tests show how scaffolding behaves, diag. p58 Nov 16
Honeycomb core reduces weight of elevator cab. NP p57 Nov 23
Scaffold tests questionned: RC p13 Dec 14

ENGINEERING, see also: CONSTRUCTION; CONTRACTS; CORPS OF ENGINEERS; EDUCATION
Congress of International Union of Architects on brave new world in homebuilding. e p80 Jul 27
Fewer big consultants and Architect-Engineers, more Architects, 1960 table. p24 Aug 17
Fluor Corp. ranks estimating as big business, diag. p110 Aug 17
Florida engineers get tax break. p63 Aug 31
Frankfort, Ky, consultants placed under U.S. scrutiny for taxes. p63 Aug 31
Consultants state their position. p23 Sep 7
New engineering bldg opens in NYC,*. p23 and e p84 Sep 7
Engineers or architects? RC p12 Sep 21
Engineers and foreign aid. e p94 Oct 5
Consultants urged to hire defense against claims. p27 Nov 9
Jacob Feld: specialist on sick structures,**. p50 Nov 9
"Shadow of the boss" is missing on construction today. e p88 Nov 9
Foreign aid consultants: pro and con. RCs p6 Nov 30
Demand for engineers to double, but the supply heads down. p28 Dec 7
Failures spur engineer inspection law in Michigan. p26 Dec 14
Engineers and scientists' glamor. RC p20 Dec 21
Consultants mostly optimistic about 1961 business; table of firms by number of engineers employed. p41 Dec 21
Engineering services cost indexes. p84 Dec 21

• Employment, Fees, Licensing
Harrisburg licensing chief fired for interference. p23 Jul 13
I work for my boss, not for the government,*. p28 and RC p10 Jul 27 Aug 31
Graduates in demand, salaries higher. CW p17 Dec 14

• Societies

American Society of Civil Engineers
Engineering center moves to new bldg. p23 and p84 Sep 7
Annual convention: water research, city planning, transportation,**. p21 Oct 26
New president: G. Brooks Earnest,**. p54 Oct 26
Revamps its meetings: one subject at each convention. e p100 Oct 26

Consulting Engineers Association of Colorado
Report to governor on advantages of hiring consultants. CW p19 Nov 16

National Society of Professional Engineers
Urges payola penalties. p23 Jul 13
New York professional men plan state-wide association. p125 Nov 16

ENGINEERING NEWS-RECORD
Please acknowledge answers to your ads. e p92 Aug 24
Women in Construction praise ENR. RC p8 Dec 7

EQUIPMENT, see also: EARTHMOVING; HAULING
Giant machines for deep-water work at Chesapeake Bay,**. p24 Jul 6
Machinery orders up in May, graph. p66 Jul 27
Manufacturers report dip in June orders, graph. p63 Aug 31
Machinery orders rise forecast, graph. p69 Sep 7
Capital spending abroad by U.S. industry, table. p80 Sep 14
Domestic capital outlays to dip, table. p80 Sep 14
List price ease. p80 Sep 21
Equipment orders turn down in July, graph. p261 Sep 21
Don't use welder to start stubborn heavy motors. p48 Oct 12
Orders for construction machinery rise slightly, graph. p85 Oct 26
Faster depreciation allowances on equipment. e p106 Nov 2
Capital spending plans for 1962, rtable, p23 Nov 9
New orders decline 5% from August, graph. p78 Nov 23
Plant and equipment expenditures rising; table of passed and planned spending. p71 Dec 14
Equipment and materials costs report and outlook, tables, graphs. pp51-108 Dec 21
Rental rates table. p88 Dec 21
Equipment price trend, tables, graphs. p89 Dec 21

• Bulldozers, Loaders
Biggest paydozer weighs 61 tons,*. NP p45 Jul 6
Pusher and counterweight attachment for Cat loaders,*. NP p49 Dec 7

• Compactors, Crushers, Rollers, Vibrators
Paving a parking area near Minneapolis,**. p30 Aug 3

• Compressors
LeRoi makes new line of single or two stage compressors. NP p51 Jul 13

• Cranes, Hoists; Shovels and Diggers, see also: EARTHMOVING
Scottish firm builds crane to lift 100 tons at 122 ft,*. p58 Jul 20
Heavyweight truck crane will hoist 90-ton load. NP p67 Jul 20
Climbing crane casts core for 60 story Marina City apts, Chicago,*. p26 Sep 14
Hydrocrane is mounted on self propelled wagon,*. NP p70 Nov 16

• Drills
Rotary percussion drill by Joy makes U.S. debut,**. NP p44 Aug 3
Horizontal hole driller has 300 ft penetration. NP p40 Sep 7
Chicago pipeline contractor drills concrete pavement,*. p24 Oct 12
Under slung motor makes masonry hand drill more efficient,*. NP p61 Nov 2
Benoto French boring rig for Montreal tough foundation job,**. p36 Nov 30

• Engines, Power units
Electric generator line provides portable power. NP p67 Jul 20
Swiss firm gets turbine job for Calif steam power plant. p66 Jul 27
Low volt circuit breaker upgrades ampere ratings. NP p55. Aug 10
Mack Trucks: diesel power raised without adding weight. NP p65 Nov 16

• Scrapers
Power shift, less weight for redesigned Tournapull. NP p57 Nov 23

• Spreaders
Hydraulic cab control for Swenson spreaders. NP p70 Nov 16

• Tools and Instruments
Truck mounted altitude meter for U.S. Geological Survey. p48 Oct 12
Variable area flow meter produced with metal tube, NP p60 Oct 19
TAB Chicago engineers designs and drafts on blackboards, then photographs,*. p113 Dec 21
Water detector finds leaks,*. NP p123 Dec 21
Acme line of air handling equipment tailored to industrial needs. NP p124 Dec 21

• Tractors
Shock absorber device for scraper-tractor push loading. NP p61 Nov 2
Tractor shovel by Allis Chalmers features power operation,*. NP p49 Dec 7

• Trucks and Vehicles, Tires, see also: "EARTHMOVING; HAULING
Hoist makes rear dump out of flat bed truck. NP p45 Jul 6
Lift truck refines air and oil with delicacy. NP p46 Jul 6
Combination body fits most small trucks. NP p59 Oct 19

• Various
Pattern spray gun for drywall textures. NP p46 Jul 6
Glass fiber insulators for feeder and plug-in busways,*. NP p50 Jul 13
Danish fan offers variable axial flow. NP p67 Jul 20
Contractor built machines for continous reinforced paving,**. p42 Oct 5

EROSION, see: SOIL MECHANICS

ETHICS, see also the Department in question
Sorry atmosphere of corruption in NYC's Board of Education. CW p17 Jul 6
New Mexico moves to clean hwy mess. p23 Jul 13
NSPE urges payola penalties. p23 Jul 13
Licensing chief fired for interference in Harrisburg. p23 Jul 13
Delaware state officials warn builders on ethics. p81 Jul 13
The cost of corruption. e p96 Jul 13
The almighty ruble: corruption in Russian construction. e p96 Jul 13
Pirating of engineering personnel. RC p7 Jul 20
What to do about graft. RCs p11 Jul 20
AGC opens fire on corruption. CW p17 Jul 20
To stop corruption. e p126 Jul 20
J.T. Weiss, NYC's school superintendent, suspended. CW p15 Aug 3
ARBA recognizes corruption. CW p15 Aug 3
Florida governor acts to prevent road scandal recurrence. p23 Aug 3
Who is responsible for corruption. RCs p8 Aug 24
Proposed law against payola. WO p19 Oct 5
AGC moves against corruption,*. p21 Nov 2
Honesty in construction. e p106 Nov 2
Atlanta proposes code of ethics to govern shelter jobs. CW p17 Dec 7

EXPLOSIVES
Plot to blow up Oregon road near Cougar Dam as revenge for firings. CW p17 Aug 10

F

FANNIE MAE (Federal National Mortgage Association), see: HOUSING

FEDERAL AVIATION AGENCY, see AIRCRAFT; AIRPORTS

FIRE, see also: SAFETY
Bad news on fires, dismal records for 1960. e p104 Oct 12
Concrete prestressers stress fire resistance. p26 Oct 26
Building code and zoning changes will result from Los Angeles fire. CO p19 Nov 16

FLOODS, see also: WEATHER
Chicago area maps flood risks. p23 Jul 6
Los Angeles Flood Control District builds wall of wells to hold back Pacific, map. p28 Jul 13
Hurricane Carla's floods. p42 Sep 21
Right flood, wrong city: pix captions reversed on Sep 21. RC p8 Oct 26

FLOORS AND CEILINGS
Prefab floor plank combines sub flooring and a hardwood face. NP p45 Jul 6
Floor operated grinder finishes concrete ceilings. NP p50 Jul 13
Spraying produces acoustical ceiling,*. p141 Sep 21
Lath tie failures spur ceiling studies in Corps of Engineers bldgs. p26 Nov 9
Plaster ceiling failures. p29 Nov 16
Acoustical ceiling vents air,*. NP p65 Nov 16

FLUORIDATION, see: WATER SUPPLY, Treatment

FOUNDATIONS, see: BRIDGES; BUILDINGS; CAISSONS; EARTHMOVING; PILES; SOIL MECHANICS

FRAMING see: BEAMS; CONCRETE; DESIGN; STEEL

FROST, ICE, SNOW
Foundation plans for Alaska dam project. RC p6 Aug 17
Big snow melter in Westmount, Montreal,*. p41 Nov 9
Elaborate road defenses thwart avalanches on Trans-Canada hwy,**, diags. p40 Dec 7

G

GARAGES, see: BUILDINGS

GARBAGE, see: HEALTH

GAS, see: PIPES; UTILITIES

GENERAL SERVICES ADMINISTRATION, see also: BUILDINGS, Federal
Gets $212m bldg contract, table,*. p21 ... Aug 24

GIRDERS see: BEAMS

GLASS
Two glass enclosed tower bldgs planned for London,*. p44 ... Aug 24
Pneumatic storage offers glass walls. NP p123 ... Dec 21

H

HAULING, MATERIALS HANDLING, see also: EARTHMOVING; EQUIPMENT; TRANSPORTATION
Conveyor belt twists on return trip,*. NP p45 ... Aug 31
Hod buggy designed for fork-lifts,*. NP p39 ... Sep 7
Electricity powers big fork lift truck by LeTourneau,*. NP p47 ... Sep 14
Giant shiploader begins ore job in Quebec,*. p50 ... Oct 19
Trailer mounted conveyor at Wilmington Marine Terminal pier,*. p53 ... Oct 19
Rail cart positions concrete beams,*. p54 ... Oct 19
Two-mile conveyor brings rock fill for N.J. hwy interchange,**. p30 ... Oct 26
Coal-water slurry to be piped. p28 ... Nov 16
Morrison-Knudsen construction camp in trailers follows jobs,*. p116 ... Dec 21

HEATING see: AIR CONDITIONING, HEATING

HIGHWAY DESIGN
Road photographs in Museum of Modern Art,**. p23 ... Aug 31
Capital Beltway, Virginia, has complicated interchanges,**, diags. p26 ... Aug 31
New Jersey Turnpike installs median guard rail,**. p136 ... Sep 21
Hwy engineering is pretzel bending with taxpayers furnishing the dough. RC p8 ... Sep 28
Findings on Ottawa, Ill. test road not ready yet. CW p17 ... Oct 5
Hwy approach ramps seen as shelters,*. p25 ... Nov 2
Elaborate road defenses thwart avalanches on Trans-Canada hwy,**, diags. p40 ... Dec 7

HIGHWAYS, see also: PAVING; SAFETY; TRAFFIC
Kennedy signs hwy financing into law. WO p19 ... Jul 6
Rex Whitton, nation's #1 hwy engineer,**. p50 ... Jul 27
BPR does a good job. e p80 ... Jul 27
ARBA recognizes corruption. CW p15 ... Aug 3
Plans to abolish office of Commissioner of Public Roads. CW p17 ... Aug 17
Speed up in release of federal aid to Interstate. WO p19 ... Aug 24
1963 hwy funds apportioned. p25 ... Aug 24
AASHO meeting in Boston: road engineers go electronic. p22 ... Aug 31
Art discovers the hwys: photographic exhibition in NYC,**. p23 ... Aug 31
U.S. backs coordinated planning for hwys and urban development. p63 ... Aug 31
How much should truckers pay for hwys? RC p7 ... Sep 7
Hwy funds are up, table by states for 1962 and 1963. p22 ... Sep 7
Giant strides: modern engineering and management techniques on hwy construction. e p84 ... Sep 7
Regional Program Evaluation Officers named for federal aid hwys. CW p17 ... Sep 14
Hwy construction bid price indexes. p75 ... Sep 21
Wages are one fourth of hwy costs, diag, table. p263 ... Sep 21
Federal Agency revises hwy bid price index. p21 ... Sep 28
AASHO Denver convention highlights urban planning, research and payola. p25 ... Oct 19
U.S. hwy experts tour Russia, F.C. Turner leads team,*. p26 ... Oct 19
States get final funds for fiscal '63 road aid. p29 ... Oct 19
J.C. Womack, AASHO's new chief,**. p76 ... Oct 19
BPR hires a "city boy", D. Grant Mickle. CW p17 ... Oct 26
Roads and urban planning. e p106 ... Nov 2
BPR hwy indexes. CW p17 ... Nov 9
Truckers ask for increased size, weight limits on federal hwys. WO p21 ... Nov 16
BPR slows hwy fund releases. p24 ... Nov 23
Contractors' hwy bids are lower than engineering estimates. p32 ... Nov 30
Construction inspection is the weakest link in the chain. e p92 ... Nov 30
BPR asks pilot bore in Colorado for hwy tunnel. p23 ... Dec 14
Reorganization of BPR creates offices of planning and hwy safety. WO p39 ... Dec 21
Hwy bid prices inch forward; price indexes. p78 ... Dec 21

• American

Alabama
Roadbuilders must "buy American". p25 ... Oct 12

Arkansas
State road relocation unit prices. p77 ... Jul 20

California
Slipform rig paves 36 ft wide surface in one pass,*. p27 ... Sep 14
Freeway addition unit prices. p51 ... Nov 30

Colorado
Unit prices. p68 ... Aug 24
Pilot bore asked for hwy tunnel. p23 ... Dec 14

Connecticut
Timetable charts road progress. p65 ... Jul 27

Delaware
Unit prices. p48 ... Aug 3
Toll road to Maryland gets green light. p23 ... Aug 17

D. C., see also: Virginia
Opposing views on hwys around Washington. WO p19 ... Nov 2
Victory for hwys in Washington's rapid transit vs. freeway battle. WO p21 ... Nov 16

Florida
Governor acts to prevent road scandal recurrence. p23 ... Aug 3
Sunshine State Parkway extension project is very much alive. CW p17 ... Aug 10
Hwys and Jacksonville's growth,*, map. p30 ... Nov 16
Sunshine State Pkwy extension planned. p125 ... Nov 16

Hawaii
Airlift affects cost of Honolulu-Hanalei hwy; unit prices. p47 ... Sep 7

Iowa
Automatic control speed paving on Interstate 80 near Iowa City,*. p57 ... Oct 12

Kansas
How they pave for heavy duty,**. p38 ... Oct 26

Maine
Wins beauty award for 24 miles of Interstate 95,*. p29 ... Oct 19

Maryland
Toll road to Delaware gets green light. p23 ... Aug 17
Expressway bid call set for October. p82 ... Sep 14

Massachusetts
Congress extricates state from legal tangle threatening federal hwy funds. WO p19 ... Jul 20
Turnpike extension or freeway into Boston? CW p15 ... Aug 3
Who can build a hwy? Governor must ask court. CW p15 ... Aug 31
Blatnik hearings this winter. WO p39 ... Sep 21
Politics stalls Boston hwy job. p123 ... Oct 19
Turnpike Authority stands no chance of selling bonds. CW p17 ... Nov 9
Boston tollroad decision due by May. p206 ... Dec 21

Michigan
Needs $11billion for 1980 hwy demands. p22 ... Sep 7

Mississippi
Study urges streamlined road system. p23 ... Nov 30

Nevada
Freeway unit prices. p65 ... Aug 10

New Jersey
Turnpike installs median guard rail,*. p136 ... Sep 21
Two mile conveyor brings rock fill for hwy interchange,**. p30 ... Oct 26

New Mexico
BPR cuts federal aid. WO p19 ... Jul 6
State moves to clean up its road mess. p23 ... Jul 13
BPR eases restrictions on aid. WO p19 ... Aug 17

New York
Slattery Co. wins bids on Gowanus Pkwy job and on Worlds Fair roads. CW p17 ... Aug 17

Oklahoma
Road to be built from Oklahoma City to Red River in Texas. p125 ... Nov 16

Oregon
New emulsion for Douglas County cold mixed asphaltic road,*. p36 ... Oct 19
W. C. Williams, chief hwy engineer and WASHO president, dies at 65. p51 ... Dec 14

Pennsylvania
Delaware Expressway paving speeded by pipe sections,*. p43 ... Aug 31

Tennessee
Two blond ladies act as flagman, help Montgomery County road job,*. p25 ... Aug 31
City of Memphis helps state on a federal-aid hwy job. p59 ... Sep 28

Texas
Houston's freeways go out and around, map. p32 ... Jul 20

Utah
Unit prices. p54 ... Jul 27

Vermont
Hwy Dept under fire. CW p17 ... Aug 17
Winooski-South Burlington hwy unit prices. p61 ... Nov 23

Virginia, see: also D. C.
Capital Beltway goes around Washington D.C., map,**. p26 ... Aug 31
Bath county hwy and bridge unit prices. p48 ... Aug 31
Senator supports tollroad from Potomac River to Dulles Airport. CW p17 ... Nov 30

Washington
BPR vetoes grass roof over Seattle hwy. p28 ... Aug 10
Girder launcher slips, hurts three men on Seattle freeway job,*. p22 ... Dec 14

West Virginia
Interstate mileage award called political payoff. p25 ... Nov 2
Inquiry into extra interstate mileage. WO p19 ... Nov 9

Wisconsin
Contractor-built machines pave continuously reinforced hwy near Madison,**. p42 ... Oct 5

• Foreign
Great Britain pounds away at hwy modernization. p47 ... Jul 27
Mismanagement in foreign-aid hwy jobs in Peru, Cambodia and Laos. p24 ... Aug 3
US built Cambodia road is not falling apart. CW p17 ... Aug 10
West Germany's autobahns,**, map. p34 ... Aug 10
Peace Corps roadbuilders are set for Tanganyika,**. p44 ... Sep 21
Cambodian U.S.-built road demands probe. p26 ... Oct 5
Russian hwys aren't the best, but good enough for country's needs. p26 ... Oct 19
Colombia road net gets $39m from World Bank. p59 ... Nov 2
Inter-American hwy to Panama will get a push. WO p21 ... Nov 16
Let's finish the Inter-American hwy job. e p134 ... Nov 16
Designer, contractor defend US built Cambodia road. p24 ... Nov 30
Trans-Canada hwy nears completion,**, map. p38 ... Dec 7
Elaborate road defenses thwart avalanches on Trans-Canada hwy,**, diags. p40 ... Dec 7
Development credit goes for Paraguayan hwy. p40 ... Dec 14

HOISTS, see: EQUIPMENT, Cranes & Hoists

HOMES, see: BUILDINGS; HOUSING

HOTELS, see: BUILDINGS

HOUSING, see also: BUILDINGS; CITIES; CONSTRUCTION; PUBLIC WORKS
Housing bill compromises reached; easier FHA mortgages. WO p19 ... Jul 6
"Planned obsolescence" favored by International Architects' assembly. e p80 ... Jul 27
Are housing codes un-American? RC p6 ... Aug 10
Labor unions to finance housing for the elderly. WO p19 ... Aug 10
Another source of housing credit eased. WO p19 ... Aug 10
White House jacks up mortage market. WO p19 ... Aug 17
Los Angeles contractor claims Capehart ownership. p28 ... Aug 17
Low cost housing planned in Lima, Peru. p55 ... Aug 17
Housing for elderly program matures. WO p17 ... Aug 31
Downturn in loan and mortgage interest rates has halted. WO p17 ... Aug 31
FHA-insured home mortages interest rates may go back to 5½%. CW p37 ... Sep 21
Housing prices rise in New York, tables. p105 ... Sep 21
Housing design: not just for elderly. e p274 ... Sep 21
FHA holds firm on interest rates. p59 ... Sep 28
FHA agrees to glued components. CW p17 ... Oct 5
Housing contracts gain in September. p81 ... Oct 5
Military, Capehart housing reconsidered. WO p19 ... Oct 12
Civil Rights Commission pushes against discrimination in homebuilding loans. p22 ... Oct 12
FHA's home improvement loan program trips on statutes. p123 ... Oct 19
Kennedy to order housing discrimination ban. WO p19 ... Oct 26
Housing starts improve. CW p17 ... Nov 23
White House hesitates on anti-bias order. WO p19 ... Nov 30
U.S. public housing standards more consistent with Marxism than Russian. CW p17 ... Dec 7
Housing starts for 1962 to reach $1.4m. WO p19 ... Dec 7
FHA will delay boost in interest rate. CW p17 ... Dec 14
NAHB meets in Chicago, sees good home market,*. p21 ... Dec 14
FHA announces details of fallout shelter loans. p27 ... Dec 14

HURRICANES, see: WEATHER

HYDROELECTRIC POWER, see: DAMS; POWER; RIVERS

I

ICE, see: FROST, ICE

INCINERATORS, see BUILDINGS; HEALTH

INDUSTRIAL PARKS, PLANTS, SITES, see: BUILDINGS; CITIES

INDUSTRIAL WASTES, see: WATER POLLUTION

INSULATION, see: ADHESIVES, INSULATION

INSURANCE
Base rates on compensation insurance for construction. p66 ... Sep 21
Money saving insurance draws subcontractors' fire. p82 ... Nov 30

IRRIGATION, see also: RIVERS; WATER RESOURCES
Irrigation and hydro cost indexes. p75 ... Sep 21
Chinese build wooden pump for farmland irrigation,*. p43 ... Nov 9
Irrigation and hydro cost indexes. p82 ... Dec 21

J

JOINTS see: BEAMS; DESIGN

L

LABOR, see also: CONTRACTORS
President's Committee on Equal Employment Opportunity issues its regulations. p114 Jul 20
Union limitations on management's right to subcontract are not so rigid. p70 Jul 27
Try women in construction. RC p10 Aug 17
Bias curbed in apprenticeship. p80 Aug 24
Goldberg rejects Powell bill on racial discrimination in apprenticeship. p66 Aug 31
Construction employment shows substantial gain. p66 Aug 31
Quarterly wage rate roundup: labor toughest problem, tables, graphs. p53 Sep 21
Civil Rights Commission urges new anti-bias curbs. p94 Nov 2
Open shop group invades Philadelphia. p76 Nov 9
Labor gives Yankee nuclear project a good start,*. p119 Nov 16
Labor-management council on economic policy proposed. p79 Dec 7
NYC electricians: new leisure class? CW p37 Dec 21

• AFL-CIO, Unions
Hoffa undisputed boss of largest union, challenges AFL-CIO,*. p85 Jul 13
Can union force its local into arbitration? CW p15 Jul 27
UAW begins equipment talks, leading with Harvester. p62 Aug 3
Unions claim in-plant work at Goodyear. p80 Aug 24
Plumbers union meeting: SOS for local cooperation. p67 Aug 31
Local autonomy plagues union leaders. p87 Sep 14
Engineering union leader, Charles Hall, joins staff of AFL-CIO. p88 Sep 14
Engineering unions seek unity. p83 Oct 5
AFL-CIO sets a middle course on teamsters. p125 Oct 19
AFL-CIO urges non discrimination in construction jobs. p126 Oct 19
Reuther seeks building trades curbs. p80 Nov 23
Union election hangs fire; plumbers and Daniel Construction Co. CW p17 Nov 30
Baltimore electrical workers' union seeks to protect autonomy. p81 Nov 30
Dispute over maintenance work goes on. p81 Nov 30
H. Lyons jr. becomes ironworkers' president. p81 Nov 30
Building trades seek realistic unity. p77 Dec 7
Constructors' president proposes Economic Council at AFL-CIO convention. p79 Dec 7
AFL-CIO chiefs plead need for labor unity at Miami meeting. p72 Dec 14
AFL-CIO pulls itself together at Miami meeting,*. p208 Dec 21

• Boycotts, Pickets, Strikes
Complicated strike settled in Toronto. p111 Jul 20
Missile decision pending. p111 Jul 20
NLRB clamps down on boycotts; picketing in West Virginia. p112 Jul 20
The bell tolls for situs picketing. p70 Jul 27
New methods sought to settle strikes. p79 Aug 24
Contractors in the dark as to legality of strikes to obtain subcontractor clauses. p65 Aug 31
UAW strike threatens equipment makers. p60 Sep 28
Court rules lockout is not like strike, Utah Plumbing contractors case. p60 Sep 28
Strikes hit Titan ICBM sites. p60 Sep 28
Warning from McClellan on strikes on missile jobs. CW p17 Oct 5
NLRB rules Landrum-Griffin makes execution of hot cargo clauses unlawful. p83 Oct 5
Montreal unions end strike. p95 Nov 2
Cleveland ironworkers and long dispute and strike. p81 Nov 23

• Contracts, Hiring, Hours, Wages
Wages: neither boom nor bust; new 1961 increases average 13.2 cents, table. p83 Jul 6
Long term contracts and wage increases demanded by unions. p112 Jul 20
Cement industry agrees to a wage boost. p59 Aug 3
ICBM labor commission sets criteria for wages and conditions. p63 Aug 3
UAW starts contract talks, leading with Harvester. p62 Aug 3
Cleveland contractor warns on risk of federal wage controls,**. p74 Aug 10
Slowdown in wage boosts. CW p17 Aug 17
Building trades sign missile pact. p113 Aug 17
Subcontractor clauses in contracts. p113 Aug 17
New Orleans to waive travel pay to induce missile booster plant job. CW p15 Aug 31
Pennsylvania changes wage law. p65 Aug 31
Wage changes becomes effective Sunday. p66 Aug 31
Missile unit curbs Kansas wage rates. p67 Aug 31
Three year contract ends Iowa strike. p71 Sep 7
Hiring of only local men is legal. p72 Sep 7
Contractors can engage in lockouts during collective bargaining. p88 Sep 14
Davis-Bacon repeal is urged. p89 Sep 14
Wage outlook: small raises next year, graphs, tables. p56 Sep 21
Bldg trades wage rates tables. p58 Sep 21
Wage raises outrun cost of living, tables by region, by city, by trade. p64 Sep 21
Wages around the world. p82 Sep 21
Wages are one fourth of hwy costs, diag, table. p263 Sep 21
Prevailing wages have no norm, Davis-Bacon laws vary widely. p264 Sep 21
Missile Sites Labor Commission rules 8 hr show up pay for Vandenber AFB machinists. CW p17 Oct 12
Last minute contract between International Harvester and UAW averts strike. CW p21 Oct 19
Supreme Court declines to review agency shop. p126 Oct 19
Davis-Bacon report on missile work by Goldberg committee. p87 Oct 26
Davis-Bacon act revision asked. p87 Oct 26
UA contractors push peace plans. p88 Oct 26
Supreme Court approves wage-hour curb. p122 Nov 16
Average wage scale hits $3.83. p122 Nov 16
Holland report vexes industry; prevailing wages, Davis-Bacon Act, missile bases. p73 Dec 14
Electricians ask for 20 hr workweek in NYC. CW p37 Dec 21
Wages will go up in 1962, table. p77 Dec 21

• Jurisdictional Disputes; NLRB
Congress bars NLRB speed-up. p71 Jul 27
Are rubber workers doing construction work at Goodyear? p80 Aug 24
NLRB gives priority to missile bases disputes. p82 Aug 24
Maintenance work starts a new feud: Oil, Chemical and Atomic workers condemn contractors p71 Sep 7
NLRB speeds dispute handling. p264 Sep 21
NLRB's two pro-union decisions: approval of agency shop, liberalization of union elections. p87 Oct 12
Craft-industrial unions conflict over jurisdiction not solved by Goldberg committee. p87 Oct 26
Owner-operator rulings haven't clarified forry issue. p94 Nov 2
R. J. Mitchell to resign as Board chairman. CW p17 Nov 9
Dispute over maintenance work in Calif. p81 Nov 30
NLRB weakens Reuther's hand. p73 Dec 14
Miami labor meeting sets machinery for settling disputes. p208 Dec 21

• Welfare, Unemployment
Bricklayers to pay only 50¢ for prescription drugs, Insurance & Welfare Fund billed. CW p17 Jul 13
School works gives government weapon against unemployment, table. p59 Aug 3

LADDERS, see: EQUIPMENT, Various

LAKES
Suburban San Diego makes lakes from sewage effluent. p24 Aug 24

LEASE PURCHASE, see: GENERAL SERVICES ADMINISTRATION

LEGAL DECISIONS
Architect liable for damages. p72 Jul 27
No liability for bad advice. p81 Aug 10
Legal technicalities do not bar recovery. p81 Aug 10
Contract price limits recovery. p62 Aug 24
Court grants blasting damages. p63 Aug 24
Court allows contractor to compel arbitration. p63 Aug 24
Accord necessary for contract. p64 Aug 24
Court will not upset arbitration. p64 Aug 24
Court allows oral evidence. p46 Aug 31
Courts use various tests for satisfactory work. p47 Aug 31
Breach stops payments. p74 Sep 7
Surety is held liable for breach of contract. p74 Sep 7
Work was so defective it had no value. p55 Sep 14
Owner's promise was enforced. p55 Sep 14
The Miller act requires timely notice of claims. p129 Oct 19
Willful exaggeration voids lien. p130 Oct 19
Foreign law was applied to employment contract in Venezuela. p130 Oct 19
Engineer can not assume title of architect. p56 Nov 9
Unsworn statement voids lien in Ohio. p56 Nov 9
Watch your contract language. p87 Nov 16
Arbitration clause bars New York lawsuit. p87 Nov 16
Lien law is strictly interpreted. p75 Dec 14
Delaying party denied damages. p75 Dec 14
Workers and materialmen held priority claims. p76 Dec 14
In the absence of bad faith, Maryland court refuses to set aside judgement of "interested" arbitrator. p211 Dec 21
Court refuses to excuse delay. p211 Dec 21
Trail waives right to arbitration in New York case. p212 Dec 21
Deed not a bar to damage suit in Ohio. p212 Dec 21
Courts deny arbitration unless issue established. p214 Dec 21

LIGHTING
High intensity lighting at Kingston, N.Y., pays off, say hwy planners,*. p64 Jul 20
Fluorescent lamps heat office. p136 Sep 21

LOCKS, see also: DAMS; RIVERS
TVA will replace Wheeler Lock by larger structure. p20 Jul 27
World's highest lock will open at Ice Harbor Dam, Wash. p24 Jul 27

LUMBER
Prefab sub-floor shows finished hardwood face. NP p45 Jul 6
Plywood panels with heat ducts make Calif school floor,*. p39 Nov 30

M

MANAGEMENT
Housebuilding gets time-motion study,*. p38 Jul 27
Timetable charts road progress in Conn. p65 Jul 27
Paul Hardeman makes profit on missile jobs, uses CPM method,*. p68 Sep 7

MAPPING, see: SURVEYING

MARINAS, see: PORTS AND HARBORS

MISSILES, see also: AIRPORTS; DEFENSE; ELECTRONICS; RADAR
ICBM labor strikes drop sharply. CW p17 Jul 20
Labor Commission to decide on cable dispute and uneconomical practices. p111 Jul 20
ICBM labor commission takes action. CW p15 Jul 27
Low bid on second Minuteman base is below estimate. CW p15 Aug 3
NASA's facilities to expand. WO p17 Aug 3
Military funds favor missiles. p21 Aug 3
ICBM building boss moves; Hayes to head CEBMCO. p46 Aug 3
ICBM labor costs. p63 Aug 3
Schedules must be met. e p76 Aug 3
First Titan I launching complex finished on schedule. CW p17 Aug 10
Low bid for Minuteman Ellsworth base, S.D. p24 Aug 10
ICBM strikes drop, but many problems remain. p28 Aug 10
Investigation in Lowry AFB accident. CW p17 and e p128 Aug 17
Building trades sign missile pact. p113 Aug 17
Firms lose on missile jobs. CW p17 Aug 24
Missile disputes get NLRB priority. p82 Aug 24
New Orleans induces Saturn booster plant. CW p15 Aug 31
$1billion new rocket launch will be built at Cape Canaveral. p24 Aug 31
Missile unit curbs Kansas wage rates. p67 Aug 31
Paul Hardeman: missile builder makes profit,*. p68 Sep. 7
Labor disputes almost vanish. WO p19 Sep 14
NASA will let big contract near Houston and at Michoud near New Orleans. WO p17 Sep 28
Strikes hit Titan ICBM sites. p61 Sep 28
Warning from McClellan on strikes at missile jobs. CW p17 Oct 5
Labor Commission rules 8 hr show up pay for Vandenburg AFB machinists. CW p17 Oct 12
Arkansas residents complain missile silos suck water. p25 Oct 12
Labor troubles threaten missile jobs. WO p23 Oct 19
Missile base labor peace pattern planned. WO p19 Oct 26
Pearl River site chosen for Saturn launching pads. CW p17 Nov 2
U.S. pays missile base overrun, Blaw Knox gets $4.5m. p26 Nov 2
Change-order headaches will intensify on space-probe projects, says Gen. Wilson,*. p124 Nov 16
Work on labor-management agreement in Cocoa Beach, Fla. CW p17 Dec 7
Pentagon will expand Minuteman construction. WO p39 Dec 21

MODELS, see: DESIGN

MONORAILS, see: RAILROADS; TRANSPORTATION

MORTGAGES, see: HOUSING

N

NATIONAL Associations, Societies etc. – see subject

NAVIGATION, see: PORTS; RIVERS

NOISE CONTROL see: ACOUSTICS

NUCLEAR PHYSICS, see: ATOMIC ENERGY

O

OFFICES, see: BUILDINGS

OVERPASSES, see: BRIDGES

P

PAINT, see: ADHESIVES, COATINGS

PARKING, see: BUILDINGS, Garages; CITIES; PAVING; TRAFFIC

PAVING, see also: AIRPORTS; ASPHALT; CONCRETE; HIGHWAYS
Knoxville, Tenn. runway extension unit prices. p57 Jul 6
Foamed asphalt permits faster work on Minneapolis parking,**. p30 Aug 3
Pipe sections speed bridge deck paving on Delaware Expressway, Penna,*. p43 Aug 31
Poor inspection of Des Moines paving jobs. CW p15 Sep 7
Latex modified Portland Cement mortar renews Kentucky bridge deck,**. p26 Sep 7
Slipform rig paves three lanes in one pass, Calif,*. p27 Sep 14
Tennessee airport job unit prices. p126 Sep 21
Cedarapids paver speedily produces asphalt surface. CW p15 Sep 28
20 pavers bought in single order. CW p15 Sep 28
Search for cheap canal lining,**. p34 Sep 28
Contractor built machines pave continuously reinforced Wisconsin hwy,**. p42 Oct 5
Neat way to break pavement,*. p24 Oct 12
Automatic control speeds paving on Iowa job,**. p57 Oct 12
Texas runway extension job unit prices. p67 Oct 12
Automatic paver controls represents a breakthrough. e p104 Oct 12

New cationic emulsion for cold mixed asphaltic road in Oregon,*. p36 Oct 19
How they pave for heavy duty on Kansas asphalt hwys,**. p38 Oct 26
Denver builds long runway for jets,**, diag. p52 Nov 16
Baltimore concrete street paving unit prices. p98 Dec 21
St. Louis concrete runway unit prices. p103 Dec 21
Bituminous mastic waterproofs deck of Ohio steel railroad bridge,*. p115 Dec 21

PEACE CORPS
Tough training prepares men for African roadbuilding,**. p44 Sep 21
Corps deserves support of engineering profession. RC p6 Oct 19
Needs construction men. WO p21 Nov 16

PHOTOGRAPHY
Photogrammetry firms merge. p25 Dec 7

PIERS, see: BRIDGES; CAISSONS; PORTS

PILES AND PILEDRIVING
90 ft pile driven in less than 10 sec – $1m investment into firm. CW p17 Oct 5
Cylindrical pile foundations for Lake Maracaibo Bridge, Venezuela,**. p32 Oct 12
Vibration instead of impact for fast noiseless piledriving. CW p17 Nov 2
Defective piles halt La Guardia terminal work. p22 Nov 9
Sonic pile driver tested in Rhode Island,**. p24 Nov 9

PIPES AND PIPELINES, see also: SEWERS; WATER SUPPLY
Washington D.C. likes clay pipe for sewer job. RC p8 Jul 13
Expansion joint saves Calif water pipeline. p64 Jul 20
Dog drags measuring tapes for Los Angeles engineers taping pipelines. CW p15 Jul 27
Three pipe alternates priced for water transmission main; unit prices. p48 Aug 3
Versatile pipe repair clamp,*. NP p49 Aug 24
Light weight tongs quick to pock up pipe,*. NP p50 Aug 24
Pipe sections speed bridge deck paving,*. p43 Aug 31
Pipe puller goes on backhoe,*. NP p39 Sep 7
Flexible sleeves solve old pipe fitting problem. p136 Sep 21
Machine joins plastic pipe,*. NP p143 Sep 21
Chicago pipeline contractor neatly drills concrete pavement,*. p24 Oct 12
Machine backfills automatically, speeds pipelaying,*. NP p59 Oct 19
Coal pipeline planned from West Virginia to New York area. p28 Nov 16
Italian companies to build Argentine gas pipeline. p110 Dec 21
Plastic pipe pays in Colorado alkali soil,*. p116 Dec 21

PLASTICS, RUBBER, see also: ADHESIVES
Epoxy resin bonds new concrete to old for dam repairs,**. p44 Aug 17
Plastic sheets stack up as trickling filters. NP p50 Aug 24
Latex mortar for Kentucky bridge resurfacing,**. p26 Sep 7
Polyvinyl sheet waterproofs reservoir for Arizona copper company,*. p135 Sep 21
Foamed plastic makes Army bldgs in the arctic. e p72 Sep 28
Foamed polystyrene makes versatile rigid panels. NP p67 Nov 16
Urethane foam roof insulation. NP p71 Nov 16
Sprayed on urethane foam for wall insulation,*. p39 Nov 30
Polyvinyl chloride space grid roof announced in England. CW p17 Dec 14
Polyvinyl chloride rigid pipe pays in Colorado alkali soil,*. p116 Dec 21
Pigmented polyvinyl covers steel conduit. p118 Dec 21
Vinyl, neoprene, hypalon coating for big pneumatic warehouse. NP p123 Dec 21

PLYWOOD, see: LUMBER

PORT OF NEW YORK AUTHORITY
Interstate Agencies on trial. e p96 Jul 6

PORTS AND HARBORS
Rubber and steel fender in ten sizes available for piers and wharves. NP p61 Nov 2

▪ American
Norfolk, Va., port expansion,**. p34 Aug 17
Trailer mounted conveyor covers the waterfront at Wilmington Marine Terminal, Del,*. p53 Oct 19
New chief for Bureau of Yards and Docks. CW p17 Nov 9
Long Beach, Calif, two mile long harbor pier nears bid opening stage. p46 Dec 21

● Foreign
Toronto harbor marine terminal unit prices. p85 Aug 17
Giant shiploader begins ore job in Port Cartier, Quebec,*. p50 Oct 19

POWER, see also: ATOMIC ENERGY, DAMS; EQUIPMENT, Engines & Power Units; RIVERS; UTILITIES
Boom in hydro construction. e p88 Nov 9

● American
Placer County, Cal., plans dams and powerhouses. p26 Jul 6
Corps of Engineers considers study of pumped-storage sites. p27 and e p126 Jul 20
Kennedy asks unified water and power policy. p21 Jul 27
Pacific Gas & Electric gets license for Calif hydro project. CW p17 Aug 24
Four dams planned on McCloud and Pit rivers hydro projects, Calif. p25 Aug 31
Dam extension brings tighter rein on Niagara Falls. p23 Sep 7
Tunnel bids start Oregon hydro project on Deschutes River, diag; unit prices. p115 Sep 21
Big spending planned on electric powergrid. p91 Oct 12
ASCE convention: Power Division talks pumped storage. p22 Oct 26
Hawaii Thermal Co. can't find steam from volcano, moves to Calif. CW p17 Nov 2
Competition sharpens on Lower Colorado, map. p27 Nov 16
Pumped storage begins at Niagara,*. p27 Nov 16
Coal-water slurry successfully burned; pipeline planned. p28 Nov 16
Gas fed cell may power home. p58 Nov 16
Priest Rapids power produced ahead of schedule,*. p21 Nov 23
Bureau of Reclamation hires surveyors for Western power lines. p23 Nov 30

● Foreign
Germany will build power plant on Euphrates in Syria. p23 Jul 6
Peace-Columbia confusion, government expropriates British Columbia Electric Co. CW p17 Aug 10
Peace hydro is state venture, may break Columbia stalemate, map. p26 Aug 17
Mantaro hydro project in Peru questioned. RC p24 Sep 21
Colombia taps low cost power at Guadalupe hydro,*. p129 Sep 21
British Columbia to build Peace River hydro by its own forces? CW p17 Oct 12
Ontario hydro plant on Mississagi River is controlled remotely. p48 Oct 26
Mantaro hydro project, Peru: economics defended. RC p6 Nov 30
Viet Nam plans water projects, map. p40 Dec 14

POWER PLANTS AND UNITS see: POWER see also: EQUIPMENT, Engines and Power Units

PRICES, see: CONSTRUCTION

PUBLIC WORKS, see also: CONGRESS; CONSTRUCTION; ECONOMICS; HOUSING; STATE LEGISLATION
Mayville, N.D., buys large public works program in one package,*. p56 Aug 3
Public works nudges construction. p73 Aug 10
President backs public works to create jobs. WO p17 Aug 31
Federal funds spur local plans, graph, planning advances table. p19 Aug 31
Des Moines inspectors paid less than common laborers. CW p15 Sep 7
Congress votes bldg millions. p22 Sep 28
Kennedy will ask for pump-priming public works. WO p19 Dec 14
Venezuela and Colombia get public works loans. p206 Dec 21

PUMPS
Submersible aluminum pump added to Gorman-Rupp range. NP p46 Jul 6
Corps of Engineers considers study of pumped-storage sites. p27 and e p126 Jul 20
Packaged heat pumps cool Alabama shopping center,*. p49 Aug 10
Switch shuts down pump when liquid level is low. NP p49 Aug 24
Huge pumps for Fox Point hurricane dam, Providence. p24 Sep 7
Switch shuts down pump when liquid level is low. NP p40 Sep 7
ASCE convention: Power Division symposium on pumped storage. p22 Oct 26
Chinese build wooden pump for farmland irrigation,*. p43 Nov 9
Hydro with pumps. e p88 Nov 9
Pumped storage begins at Niagara, plan. p27 Nov 16
Illinois pumping station unit prices. p88 Nov 16

R

RADAR, RADIO, see also: DEFENSE; ELECTRONICS; MISSILES
Investigation on collapse of Texas Tower #4. CW p17 Jul 6
Radio telescopes sight trouble, Sugar Grove may be canceled,**. p21 Jul 6
Radio and TV station in Dallas shuts out noise,**. p44 Jul 13
Radio telescope in New South Wales, Australia,*. p41 Aug 3
Greenland's BMEWS was a bargain compared to missile jobs in the US. CW p17 Sep 14
Stanford University radio telescope almost finished,*. p23 Oct 12
Greenland bldgs: DEW line contractors win praise,*. p26 Dec 7
Stanford radio telescope, engineers, scientists and glamor. RC p20 Dec 21

RADIOACTIVITY, RADIATION, see: ATOMIC ENERGY

RAILROADS, see also: TRAFFIC & TRANSPORTATION
Mexico City to study elevated monorails. CW p17 Jul 6
Right of way above Prince George cleared for Pacific Northern Railway. CW p17 Jul 20
Crosstie saga: wood and concrete. RCs p6 Jul 27
Denver & Rio Grande Western Railroad lets contract for rugged line in Utah. p23 Aug 17
Rail program in Yugoslavia. p55 Aug 17
Congress cool to federal subsidies for railroads. CW p15 Sep 7
* Monorail at Turin exhibition, Italy, p47 Nov 16
Railroads win a round in battle to move roadbuilding machinery at reduced rates. WO p19 Dec 14
Mexico opens new rail line to the Pacific,**, map. p30 Dec 14
Arctic railroad between Grimshaw and Great Slave Lake approved in Canada. p110 Dec 21

RECLAMATION, see: SOIL MECHANICS, EROSION

RESEARCH AND TESTS, see also: STANDARDS & SPECIFICATIONS
ASTM annual meeting changes name, revises several specs. p26 Jul 6
Miles N. Clair becomes ASTM's president,*. p51 Jul 6
Loads test steel folded plate roof for Calif library,**. p31 Jul 27
Model shoreline for sea action study,*. p35 Jul 27
Homebuilding gets time-motion study: TAMAP cuts costs,*. p38 Jul 27
L. Chatelain becomes BRI's president. p46 Aug 3
Building Research Institute to end affiliation with National Research Council. CW p17 Nov 2
Tests show how scaffold behaves, diag. p58 Nov 16
Gas fed cell may power homes. p58 Nov 16
Bldg Research Institute emphasizes construction for the nuclear age. p24 Dec 7

RESERVOIRS, see also: BUILDINGS, Storage, Tanks; WATER SUPPLY
Plastic lining waterproofs Arizona reservoir,*. p135 Sep 21
Ohio concrete reservoir unit prices. p59 Oct 26

RIVERS, see also: DAMS; LOCKS; WATER RESOURCES
Techniques and trends, major projects,**. p76-100 Jan 26
Helicopter takes river soundings. p98 Apr 13
T. Roncalio becomes U.S. chairman of International Joint Commission. WO p19 Apr 20
and e p102 Apr 27

Colorado River
New idea for Bridge and Marble Canyons. CW p17 Jul 13
Power picture made clear. RC p6 Aug 17
Competition sharpens on Lower Colorado for three dams and long tunnel, map. p27 Nov 16

Columbia River
Peace-Columbia confusion, government expropriates British Columbia Electric Co. CW p17 Aug 10
Utility seizure may break Columbia stalemate, map. p26 Aug 17
Forcing the Columbia issue. e p92 Aug 24
Power play blunder; S. L. Udall irritates Canadians. e p92 Dec 7

Delaware River
Proposed pact may be agreed upon. p22 Aug 24
Brinkmanship on the Delaware. e p100 Sep 14
Boss and home wanted for Delaware River Basin Commission. CW p37 Dec 21

Euphrates, Middle East
Germany backs river development in Syria. p23 Jul 6
Bid call due on big Syrian project. p49 Oct 19

Feather River
Project goes through legislature, dates scheduled. p25 Jul 6

Hudson River
Million cu yd of bank slips into river at West Point. CW p15 Aug 31

Missouri River
Channel straightening shortens river. CW p17 Dec 7

Ohio River
New era opens on the Ohio with Cumberland lock and dam dedication,*. p23 Sep 28
$65m anti-pollution project nears completion, map. p22 Nov 2

Potomac River
Corps of Engineers studies basin development. WO p19 Nov 23
Public hearings on four proposals for river basin development, map. p24 Dec 7

Snake River
Channel deepening unit prices. p104 Dec 21

Volta River, Ghana
Project tests investment incentives. WO p19 Jul 13
Pro-red neutrality slows US loan for river project. WO p19 Oct 26
U.S. mission gives "hard look" at aid to Volta project, map. p26 Nov 2
Kennedy opens purse to Akosombo Dam project. p43 Dec 21

ROCKS, see: EARTHMOVING; SOIL MECHANICS

ROOFS
Roof tiles convert wasted space to serviceable area. NP p45 Jul 6
Monoglas fiber with silicone liquid coating make watertight roof. NP p51 Jul 13
Loads test steel folded-plate roof for Calif library,**. p31 Jul 27
Omaha grain elevator unusual roof repair: wrench work takes slack out,**. p34 Aug 3

(Continued)

(Continued)
Precast prestressed roofs have F section,*. NP p55 Aug 10
Biggest aluminum dome for Detroit "Showcases". RC p10 Sep 7
Skewed frame cylindrical arch roof for Czech skating arena,*. p41 Sep 14
Prestressed T-beams form Phoenix air terminal roof,*. p46 Sep 21
Three intersecting domes roof hexagonal Las Vegas air terminal. p27 Oct 5
Deft concreting speeds work on huge dome, Univ. of Illinois assembly hall,**. p30 Oct 5
Prestressing resists hyperbolic paraboloid thrusts at Corpus Christi hangar,*. p29 Oct 19
Sixteen umbrellas make Nervi's roof in Turin, Italy,**. p46 Nov 16
Plastic pyramids: space grid roof announced in England. CW p17 Dec 14
Three domes formed on ground are raised on different lines,**. p38 Dec 14

RUNWAYS, see: AIRPORTS; PAVING

S

SAFETY, see also: ACCIDENTS; FIRE; HIGHWAY DESIGN
Worker survives cave-in thanks to air trapped in hard hat. CW p15 Jul 27
Dragline in Arkansas River builds island for protection. CW p15 Jul 27
Dam designing for safety's sake. e p128 Aug 17
Danger is never absent: 5 killed at missile silo job near Denver. e p128 Aug 17
Steel drapes guard twin tunnels in Colorado,**. p30 Sep 14
New Jersey Turnpike installs median guard rail,*. p136 Sep 21
Dulles Airport job boasts ideal first aid station. p27 Oct 12
Temporary structures demand just as much safety precautions, National Safety Council meeting told. p27 Oct 26
Skin coating prevents dry or wet cement burns. NP p71 Nov 16

SANITATION, see: HEALTH; SEWAGE; WATER POLLUTION

SAWS, see: EQUIPMENT, Tools

SCAFFOLDING, see: ELEVATORS, SCAFFOLDING

SCHOOLS, see: BUILDINGS

SCRAPERS, see: EARTHMOVING; EQUIPMENT

SEABEES, see: NAVY

SEALANTS, see: ADHESIVES, SEALANTS

SEISMOLOGY, see: SOIL MECHANICS

SEWERS, see also: PIPES; WATER POLLUTION
Federal grants for treatment plants are certain. WO p19 Jul 6
Legislation adds money for sewerage. WO p19 Jul 20
Compact plants to treat sewage made by Dorr-Oliver, diag. NP p57 Aug 17
Sewerage construction are climbing with federal aid, graph. p21 Oct 5
Zimmerman wet-sludge burner for small cities,*, diag. NP p40 Nov 30
Treatment plants no panacea. RC p8 Dec 7

• American

Alabama
Big activated sludge plant for Scott Paper Mill, Mobile,**. p34 Dec 7

Alaska
Fairbanks sewer unit prices. p47 Sep 7

California
Los Angeles plant will reclaim sewage water for reuse. p26 Jul 20
San Diego sewer bids soar above estimates. p23 Aug 10
Suburban San Diego makes lakes from sewage effluent. p24 Aug 24
Sacramento county to build seven sewage plants, map, table. p26 Oct 12

Delaware
Wilmington sewage plant improvement bid comes ½ min late, takes job. CW p21 Oct 19

Iowa
Sanitary sewer system unit prices. p122 Sep 21

Kentucky
Maysville will finally build a sewage plant. CW p17 Oct 26

Maine
No state match for federal grants? CW p17 Oct 26

Maryland
Master plan for sewerage mapped. p24 Oct 5

Missouri
Sewer study for metropolitan St. Louis to be done by 9 firms. CW p19 Nov 16

New Jersey
Sewer unit prices. p97 Dec 21

Oregon
Eugene sewer study spurs bond issue. p24 Nov 30

Pennsylvania
Phila's Mill Creek old sewer caves in. p22 Jul 27

West Virginia
Ripley sewerage unit prices. p77 Jul 20

• Foreign
Expanded facilities considered for Winnipeg, Canada. p40 Dec 14

SHELTERS, see: BUILDINGS, Shelters

SHIPWAYS, see: PORTS AND HARBORS

SKYSCRAPERS, see: BUILDINGS

SLUM CLEARANCE, see: CITIES; HOUSING

SNOW, see: FROST

SOCIETIES, see subject, e.g. ENGINEERING, RESEARCH etc.

SOIL MECHANICS; EROSION; FOUNDATIONS
Wall of wells will hold back Pacific for Los Angeles Flood Control District, map. p28 Jul 13
Dewatering system permits dry foundation work in 34 ft of water, Houston's Humble Oil bldg,**. p41 Jul 20
Los Angeles county faces $8m land slip suits. p104 Jul 20
Sand sculpture of the sea can be forecast with model shoreline,*. p35 Jul 27
Maryland warns on excessive stripping of land from trees and undergrowth. CW p17 Aug 17
Soil density and moisture density gage – new soil testing instruments. NP p58 Aug 17
Soil experts emphasize field work for dam construction. p23 Aug 24
Shore protection: hurricane tests Galveston seawall. CW p17 Sep 14
Steel drapes hold rock, guard Colorado tunnel,**. p30 Sep 14
Underpinning supports walls, columns, earth in Ballantine's bldg, N.J.,**. p40 Sep 28
Soil Mechanics division of Illinois ASCE discusses foundation failures. RC p14 Oct 12
Portable soil testing devices. NP p65 Nov 16
Cavernous limestone troubles dambuilders. p22 Nov 23
French boring rig for Montreal grain elevator tough foundation job,**. p36 Nov 30

SONIC BOOM, see: ACCIDENTS; ACOUSTICS; AIRCRAFT; DESIGN

STANDARDS, SPECIFICATIONS, see also: BUILDING CODES; DESIGN
Steel tube standard urged. CW p17 Jul 13
Ohio steel fabricator against specs that encourage joist imports. p27 Jul 20
Steel joist spec needs revision. e p126 Jul 20
Learning from failures. e p92 Aug 10
Concrete bearing stress formula. RC p10 Sep 7
In defence of Steel Joist Institute specification. RC p6 Oct 5
FHA agrees to glued components provided they meet specs. CW p17 Oct 5
Code changes ahead for steel and concrete. p25 Dec 7
Other side of the coin: bldg officials must show some conservatism on codes. e p84 Dec 14
Prestressed Concrete Institute code requirements. CW p37 Dec 21
FHA approves new specification on fiberboard sheathing. p44 Dec 21

STATE LEGISLATION AND FINANCES, see also: TAXES
Legislatures in 9 states vote bldg billions. p81 Jul 6
Interstate agencies on trial. e p96 Jul 6
Kentucky's income fails; no new bldg starts. CW p17 Nov 2
Fallout shelter bill passes in New York. p26 Nov 16
Pennsylvania starts $200m worth of construction. CW p17 Nov 23

STEEL
Tubular standards urged. CW p17 Jul 13
U.S. Steel rolls square tubular shapes, table; cuts costs of Elmira school,*. p47 Jul 13
Zinc coated steel grips paint, speeds welding. NP p51 Jul 13
Ohio steel fabricator says specs encourage joist imports. p27 Jul 20
Plastic design reduces steel for Georgia armory frame,*. p62 Jul 20
Steel joist spec needs revision. e p126 Jul 20
Administration builds offensive against possible price boost. p62 Aug 31
Battle over price increases looms. WO p17 Sep 7
Steel drapes guard twin tunnels in Colorado,**. p30 Sep 14
Extend spans to decrease costs: new fabricating of structural beams,**. p91 Sep 21
Makers blast Kennedy's plea on steel prices. p260 Sep 21
A36 is a slenderizing economizer, will save NYC $10m. CW p15 Sep 28
AISC cites most beautiful bridges,**. p24 Sep 28
In defense of Steel Joist Institute specification. RC p6 Oct 5
Prestressed steel offers designers a new tool, Industrial Bldg Congress told. p24 Oct 5
Alligator-jaw bents make stadium frame,**. p40 Oct 12
Prestressing steel stringers reduces Iowa bridge weight,*, diag. p32 Oct 19
Prestressed structural steel: new tool for cost cutters. e p140 Oct 19
More web steel. RC p8 Nov 9
New series of steel joists, L, LA, H, from A36 steel. p17 CW Nov 9
A36 cuts cost and weight for Calif factory,**, diag. p30 Nov 9
and for Hartford office tower,*. p32 Nov 9
Two steel framed structures fail in NY state. p24 Nov 23
Elevated steel water tank falls in Jackson, Miss. p25 Nov 23
All welded bridge spans the Potomac,**, diags. p32 Nov 30
Steel framing cuts costs for three Calif homes,**. p32 Dec 7
Prepainted steel conduit for Michigan steel mill cuts costs. p118 Dec 21

SUBWAYS see: CITIES; RAILROADS; TRANSPORTATION

SURVEYING, MAPPING, DRAWING
Altitude meter is truck mounted, accurate. p48 Oct 12
Bureau of Reclamation hires surveyors for Western power lines. p23 Nov 30
Blackboards cut design and drafting costs,*. p113 Dec 21

T

TAXATION
Tax change action may await 1962. p23 Jul 6
Tax break bid bypasses bldgs; incentive for plant and equipment. WO p19 Jul 20
Tax law writers heed industry's pleas. p66 Jul 27
Tax man smiles on overseas bldg. WO p17 Aug 3
Tax break for equipment buyers still possible. WO p19 Aug 10
Builders oppose savings and loan tax plan. WO p19 Aug 17
Cold war freezes tax credit plan. WO p19 Aug 24
Florida engineers get tax break. p63 Aug 31
Frankfort, Ky, consultants under U.S. scrutiny for taxes. p63 Aug 31
How much should truckers pay for hwys? RC p7 Sep 7
Tax depreciation allowances will ignore construction. WO p19 Oct 23
Taxes and urban growth. e p100 Oct 26
User charges on barge lines, airlines, trucks discussed. WO p19 Nov 2
Tax change drive builds anew. p92 Nov 2
Tax break for construction: depreciation allowances on equipment. e p106 Nov 2
Tax break proposed for plant construction. WO p19 Nov 9
Early death predicted for tax-break bill. WO p19 Nov 23
Tax change talk at Florida meeting of Bankers Asso. CW p17 Nov 30
Kiewit appeals $20m tax bills. p83 Nov 30

TELEPHONE, see: UTILITIES

TELEVISION, see also: BUILDINGS, Towers
Radio-TV station in Dallas cuts out noise,**. p44 Jul 13

TENNESSEE VALLEY AUTHORITY
A. S. Fry retires from hydraulic data branch. p61 Aug 10
Paradise steam power stack reaches 600 ft,*. p24 Nov 30
High stack in Benton to be wrecked. CW p17 Dec 14

TEXAS TOWERS, see: RADAR

TILES, see: BRICKS, CERAMICS

TIRES, see: EQUIPMENT; PLASTIC & RUBBER

TOLLS, see: BRIDGES; HIGHWAYS

TRAILERS, see: EQUIPMENT; HAULING

TRAFFIC, TRANSPORTATION, see also: CITIES; HAULING; HIGHWAYS; RAILROADS
Yale's Bureau of Hwy Traffic is a unique school,**. p30 Jul 6
Urban renewal is a boost for mass transit. e p96 Jul 13
San Francisco rapid transit plans get severe setback. CW p15 Aug 3
San Francisco Bay transit plans are ready,*, map. p21 Aug 10
Los Angeles wants federal loan for transit. p22 Aug 10
Suburban counties join Philadelphia's transit plan. p26 Aug 24
Rapid transit for Golden Gate Bridge. p21 Aug 31
Ladies successfully divert traffic during Tennessee road construction,*. p25 Aug 31
Atlanta reaches for rapid transit, map. p21 Sep 7
Transit Agency calls for ideas for Washington, D.C. area. p21 Sep 7
No trains on Golden Gate bridge. p26 Sep 14
Trains for Golden Gate Bridge? CW p17 Oct 5
President's transportation message will ask urban aid. WO p19 Oct 5
Office of Transportation established in HHFA. CW p21 Oct 19
Who is right on Golden Gate rapid transit? CW p17 Oct 26
ASCE convention talks on transportation: improve urban hwys. p25 Oct 26
Montreal gets subway go-ahead. p25 Nov 2
Philadelphia transit line shows dishonest construction. p27 Nov 2
Monorail proposal for Los Angeles. CW p17 Nov 23
White House studies urban transit plans. WO p19 Dec 7
Planners stress transit at annual convention. p23 Dec 7

(Continued)

(Continued)

Alweg Monorail proposes Los Angeles rapid transit system. p23 ... Dec 7
Hovercraft rapid transit studied in London. CW p17 ... Dec 14
Milan starts subway excavations,*. p109 ... Dec 21
Nation's mayors pressuring a $1.75 billion transit program. WO p39 ... Dec 21
Los Angeles rejects monorail transit proposal. p46 ... Dec 21

TRUCKS, see: EQUIPMENT, Trucks; EARTHMOVING; HAULING

TRUSSES, see: BEAMS, GIRDERS, TRUSSES

TUNNELS

• American
Giant machines for Chesapeake Bay job,*. p24 ... Jul 6
H. B. Roberts tunnel concreting finished; will bring water to Denver,**, diags. p38 ... Jul 6
Forbestown Tunnel in Sierra Nevada sets one week speed record. CW p15 ... Jul 27
Reconstruction starts on San Rafael freight line rail tunnel, Calif. p23 ... Jul 27
Road tunnel will pierce Continental Divide at Straight Creek, west of Denver,*. p25 ... Aug 17
Water crossings – Norfolk's big hope,*, map. p35 ... Aug 17
Pacific RR to abandon collapsed tunnel in San Rafael, Calif. CW p15 ... Aug 31
First tunnel section sunk on Chesapeake Bay. CW p17 ... Sep 14
Steel drapes guard twin tunnels in Colorado,**. p30 ... Sep 14
Chesapeake Bay tube section damaged by hurricane Esther. CW p17 ... Oct 12
How to name the new crossing. RCs p16 ... Oct 19
Chesapeake Bay Bridge-Tunnell will be the official name. CW p17 ... Oct 26
Big job for NORAD at Cheyenne Mountain: underground air defense command center,**, diag. p38 ... Nov 16
Chesapeake Bay Bridge-Tunnel is a great crossing,**, map. p32 ... Nov 23
Pilot bore will be drilled for Colorado hwy tunnel. p23 ... Dec 14
NYC plans water tunnel, awards another. p27 ... Dec 14
Clancy O'Dell tunnel boss to take Carlyon Tunnel job in San Fran water system,*. p44 ... Dec 21

• Foreign
Kemano power tunnel repairs will cost $2m, Alcan says. p23 ... Jul 20
Talks proposed for English channel link. p24 and e p80 ... Aug 31
British let contract for tunnel under Tyne. p130 ... Sep 21
French-British commission finds underwater rail tunnel cheapest for English Channel. CW p21 ... Oct 19
British and French study Channel link, map,*, diags. p21 ... Nov 30
Tunnels on Mexico's rail line,*, map. p30 ... Dec 14

U

UNDERPASSES, see: TUNNELS

UNIT PRICES, see: CONSTRUCTION, Unit Prices

URBAN RENEWAL, see: CITIES

U.S., see: AIR FORCE; CONGRESS; CORPS OF ENGINEERS; NAVY

UTILITIES, see also: POWER; WATER
Illinois Gas Co. to cut electricity; will use natural-gas-fired turbines. CW p17 ... Jul 13
Power transmission grid to cost $8billion. p91 ... Oct 12
Winston-Salem, N.C: unusual policy for suburban utilities. p26 ... Dec 14

V

VEHICLES, see: EQUIPMENT, Trucks; TRAFFIC, TRANSPORTATION

VENTILATION, see: AIR CONDITIONING, HEATING, VENTILATION

VIADUCTS, see: BRIDGES

VIBRATORS, see: CONCRETE, Mixing and Placing; EQUIPMENT

W

WALLS
Expanded use predicted for metal curtain walls. p68 ... Jul 27
One coat enamel process cuts curtain wall costs. NP p55 ... Aug 10
Air walls for World's Fair bldg,*. p23 ... Aug 24
Coated asbestos wall cuts down on dust. p43 ... Aug 31
Hurricane Carla tests Galveston seawall. CW p17 ... Sep 14
Aluminum wall panels for meat-packing plant cold rooms,**. p33 ... Sep 14
Curtain wall aluminum panels interlock without nuts or bolts. NP p143 ... Sep 21
Wood shaving brace partition. NP p143 ... Sep 21
Wood-like facing acts like stone in factory-assembled siding,*. NP p144 ... Sep 21
Sandwich panel walls have new filling,*. p48 ... Oct 12
Counterweighted beam lifts, balances wall panels,*. NP p60 ... Oct 19
Projecting glass wall cuts solar heat for Norfolk Municipal tower, Va,*. p24 ... Nov 23
Folding partitions act like fixed wall, make acoustical barrier,*. NP p49 ... Dec 14

WATER POLLUTION, see also: RIVERS; SEWAGE
Raritan Bay area cleanup planned after hepatitis outbreak. CW p17 ... Jul 6
Water, air pollution gain greater stature. WO p19 ... Jul 20
PHS calls parley on North Platte River pollution. CW p37 ... Sep 21
Is federal aid halting pollution, graph. p21 ... Oct 5
Milwaukee water polluted by pink antifreeze. CW p17 ... Oct 12
Harry E. Schlenz heads Water Pollution Control Federation,*. p61 ... Oct 12
New wastes research needed. e p104 ... Oct 12
Water Pollution Control Federation meets in Milwaukee; stream cleanup progress discussed. p28 ... Oct 19
Ohio River gets $65m clean-up, map. p22 ... Nov 2
J. M. Quigley to represent Ribicoff on pollution control program. WO p19 ... Nov 23
Biggest waste treatment plant for Scott Paper Co., Alabama,**. p34 ... Dec 7

WATER RESOURCES, see also: IRRIGATION; POWER; RESERVOIRS; RIVERS; TUNNELS
California water sufficient in spite of drought. p22 ... Jul 20
Kennedy asks for unified water and power policy. p21 ... Jul 27
House lags on President's water council. p25 ... Aug 24
Ontario Water Resources Commission and its jobs,*. p46 ... Oct 5
Arkansas residents complain missile silos suck water. p25 ... Oct 12
Texas water plan to cost $3 billion. p30 ... Oct 19
ASCE on water research and future urban needs. p22 ... Oct 26
Water is not short; vision is. e p100 ... Oct 26
Eastern and western slopes of Continental Divide: cities' rights to water. CW p17 ... Nov 2
Homestake water diversion-project start set for January. p27 ... Nov 9
Viet Nam plans water projects, map. p40 ... Dec 14
Bureau of the Budget may lose its water power. WO p39 ... Dec 21

• Treatment
Congress agreeable to desalting push. WO p19 ... Jul 6
54 desalting plants planned in ext four years. WO p17 ... Jul 27
Solid prospects for desalting plants, table. p23 ... Aug 3
PHS revises drinking water standard. p24 ... Aug 3
Don't count on cheap seawater yet. p76 ... Aug 3
Corrosion hits Freeport, Texas, desalting plant. CW p17 ... Aug 24
Congress pares Kennedy's saline water program. p24 ... Aug 31
Expanding desalting program is certain. WO p17 ... Sep 7
Analyzer keeps track of chlorine in water. NP p40 ... Sep 7
Saline water research gets $75m. WO p19 ... Sep 14
Desalting: boon or boondoggle?**. p41 ... Sep 21
Don't wait for desalted water. e p72 ... Sep 28
Fourth desalting plant to be built in Roswell, N.M. WO p19 ... Oct 12
Speculating in water treatment: shares to be sold. CW p21 ... Oct 19

• Waterworks, Water Mains, see also: PIPES
Ohio water main contract unit prices. p124 ... Sep 21
Dayton, Ohio, taps main line in the dry,**. p45 ... Oct 26
New York City plans water tunnel, awards another. p27 ... Dec 14
Hebron, Indiana, waterworks program unit prices. p55 ... Dec 14
Canyon Tunnel in San Francisco water system to start. p44 ... Dec 21

WEATHER
Gulf Coast and Midwest tally hurricane Carla's toll,**. p42 ... Sep 21

WELDING
Machine makes friction weld. NP p57 ... Aug 17
Machine makes friction weld. NP p45 ... Aug 31
Welded steel frame for Milwaukee Expressway overpass,**, diag. p36 ... Sep 14
Unorthodox use of welder to start stubborn motor. p48 ... Oct 12
Ohio bridge redesign wins welding contest award. p28 ... Nov 30
All welded steel bridge spans the Potomac,**, diags. p32 ... Nov 30

WELLS
Wall of wells will hold back Pacific near Los Angeles, map. p28 ... Jul 13

WHARFS, see: PORTS AND HARBORS

WIND, see: ACCIDENTS; RESEARCH AND TESTS; WEATHER

WOOD, see: LUMBER

WORLD'S FAIR, see: CITIES, New York

Z

ZONING, see also: BUILDING CODES; CITIES.
NYC new zoning widens city canyons,*. p111 ... Aug 17

AUTHORS, PERSONALITIES

ACKERMAN, ADOLPH J.
Mantaro hydro project in Peru questioned. RC p24 ... Sep 21
ANGELL, A. S.
Bigger drag bucket. RC p14 ... Oct 12
BALDWIN, E. W.
Lightweight concrete frames for Pittsburgh Greyhound Bus Terminal,*. p54 ... Nov 23
BALOG, LOUIS
Safety for Kariba Dam rock foundations: RC p7 ... Sep 7
BATES, A.
Becomes director of University Valley, NYU's research & educational center. p67 ... Nov 2
BERRY, ALBERT E.
Chief of Ontario's Water Resources Commission,*. p46 ... Oct 5
BESSELIEVRE, EDMUND B.
Correction on Wilshire Blvd land prices. RC p8 ... Nov 9
BLOODGOOD, GRANT
Search for cheap canal lining,**. p34 ... Sep 28
BODINE, ALBERT G. Jr.
Inventor of acoustic apparatus for driving piles,**. p24 ... Nov 9
BOWMAN, HARRY L.
Leaves Drexel Institute of Technology. p72 ... Nov 16
BOWMAN, WALDO
Dam congress in Rome spotlights foundations. p26 ... Jul 13
West German construction is booming, **, map. p33 ... Aug 10
Italy builds more dams,**, maps, diags. p30 ... Nov 2
Sixteen umbrellas make a bldg in Turin, Italy,**. p46 ... Nov 16
BRADBURY, W. E.
In defense of Steel Joist Institute specification. RC p6 ... Oct 5
CANNON, D. C.
Becomes Perini's vice-president,*. p78 ... Oct 19
CHARLTON, DAVID B.
Thompson & Lichtner are not the only firm to test, research, design and supervise. RC p35 ... Sep 21
CHATELAIN, LEON JR.
Becomes president of Building Research Institute. p46 ... Aug 3

(Continued)

(Continued)

CHEVALIER, WILLARD T.
Noted engineer-publisher dies, joined ENR in 1922,*. p22 ... Jul 6
CLAIR, MILES NELSON
Massachusetts consultant takes ASTM helm,*. p51 Jul 6
CLAY, GENERAL LUCIUS D.
Ambassador to Berlin is Corps of Engineer alumnus and member of ASCE. CW p15 ... Sep 7
CROWLEY, FRANCIS X.
Corrosion and failures. RC p12 ... Nov 16
DAVINROY, THOMAS B.
Peace Corps rates engineering support. RC p6 ... Oct 19
DAY, JOHN
Sociology of site selection. RC p8 ... Jul 13
DEACON, DONALD L.
What to do about graft. RC p11 ... Jul 20
DOUGHERTY, RICHARD E.
Engineering vice-president of NYCentral Railroad dies,*. p27 ... Oct 5
DRISCOLL, GEORGE F.
Graphical method simplifies economical blending of aggregates. p134 ... Sep 21
DUBOIS, M.
Conrad Zschokke Ltd. on Swiss basement job. RC p10 ... Oct 5
DUNN, WILLIAM E.
Becomes AGC's executive director. CW p19 ... Nov 16
EARNEST, G. BROOKS
College head becomes ASCE president,**. p54 ... Oct 26
ENGDAHL, S. A.
Lowering masts for ships on Seekong River, Rhode Island. RC p8 ... Sep 28
FELD, JACOB
Specialist on sick structures,**. p50 ... Nov 9
FISCHER, GEORGE E.
Foreign aid consultants: pro and con. RC p6 ... Nov 30
FRIBERG, BENGT F.
Do engineers or architects get the big business? RC p12 ... Sep 21
FRIEDLANDER, GORDON D.
Esthetics vs economics on Abu Simbel Temples. RC p10 ... Oct 5
FRY, ALBERT S.
Leaves TVA's hydraulic data branch. p61 ... Aug 10
FRYE, COL. ARTHUR H. Jr.
Named Engineer for Corps' South Pacific Division. p69 ... Aug 17
GANDHI, KANU R.
Mahatma's grandson at MTI. p55 ... Aug 24
GARRETT, W. S.
The origin of tiebacks. RC p9 ... Nov 2
GARRIE, LEON J.
Private non-profit organization should act as foreign aid public works architect. RC p35 ... Dec 21
GOLEMON, ALBERT S.
Architects in Houston omitted in Jul 20 article. RC p12 ... Sep 21
GOODWIN, D. G.
On the steel grating catalog. RC p8 ... Oct 26
GREENWALT, CRAWFORD H.
President of DuPont de Nemours is recipient of John Fritz medal. p130 ... Dec 21
GROS, ROBERT R.
Brighter A-power future. RC p10 ... Jul 27
HAMER, MRS. M. DAWN
Misspelled town name corrected. RC p6 ... Oct 5
HANSON, ARNOLD J.
Foundation conditions at Alaska dam project. RC p6 ... Aug 17
HARDEMAN, PAUL
Missile base builder wins profit, uses CPM method,*. p68 ... Sep 7
HAYES, THOMAS J. COL.
Becomes commander of Corps of Engineers Ballistic Missile Construction Office. p46 ... Aug 3
HAZEY, GEORGE J.
Sewage treatment plants no panacea. RC p8 ... Dec 7
HERRERA, FELIPE
Chilean president of Inter-American Development Bank moves funds into Latin America,*, map. p120 ... Oct 19
HOADLEY, PETER G.
Preflex for ultimate load. RC p10 ... Sep 14
HOFFA, JAMES R.
Becomes undisputed boss of largest union,*. p85 ... Jul 13
HOOD, J. E.
Win-place controversy. RC p12 ... Nov 2
HRYNIEWIECKI, JERZY
Polish architect for planned obsolescence in homebuilding field. e p80 ... Jul 27
HUMMEL, JOHN W.
Lightweight concrete frames for Pittsburgh Greyhound Bus Terminal,*. p54 ... Nov 23
HUNKIN, BILL
Cleveland contractor fights risk of federal wage control,**. p74 ... Aug 10
HUNT, FRED
Attitude is everything: working for the government. RC p10 ... Aug 31
JABINE, WILLIAM
Confusion: Chesapeake Bay Bridge and Chesapeake Bay Bridge-Tunnel are too near. RC p6 ... Aug 10
JACOBUS, WILLIAM W. Jr.
Is federal aid halting pollution? p21 ... Oct 5
JESSUP, G. P.
Dies after long construction career. p59 ... Nov 23
JUHL, H. G.
Slenderizing trims pier costs, diag. p37 ... Sep 7
KAO, ROBERT
Welded steel frame straddles Milwaukee Expressway,** diag. p36 ... Sep 14
KARP, MILTON A.
In defense of prefab structures. RC p8 ... Aug 24
KESLER, JAMES
American Cement HQ in Los Angeles: showcase for dramatic uses of concrete,**. p46 ... Aug 17
KILLMER, MILES I.
Noted tunnel builder dies. p77 ... Nov 16
KLINGER, WILLIAM
AGC's past president pleads against corruption,*. p21 ... Nov 2
KONDNER, ROBERT L.
Receives the 1961 A. A. Raymond award. p28 ... Nov 30
KUNZE, WALTER E.
Wood, concrete crosstie saga. RC p6 ... Jul 27
LEVINE, LEWIS
Oregon's bridge erection method was used in Greece,*. RC p10 ... Sep 14
LEWAREN, SIMON W.
Resilience in tall frames, diag. RC p9 ... Nov 2
LITEHISER, R. R.
ASTM's C-1 Committee on cement is doing a good work. RC p6 ... Oct 19
LONGORIA, ARNOLDO
Tower addition for air conditioning units at Houston hotel,*, diag. p42 ... Aug 3
LUSS, EDWARD
Promotion and testing of the delta girder section. RC p8 ... Jul 6
MARDIAN, SAMUEL Jr.
Phoenix's housing code. RC p6 ... Aug 31
MARIANI, THEODORE F.
Terminal at Idlewild will serve Northeast-Northwest-Braniff,*. p44 ... Nov 23
MARSHALL, JAMES D.
AGC's executive director dies. p27 ... Nov 9
McCASLAND, STANFORD, P.
Colombians tap low cost power at Guadalupe hydro,*. p129 ... Sep 21
MEDDING, WALTER S. CAPT.
German road sign is not speed limit but bridge classification,*. RC p8 ... Oct 12
MICKLE, D. GRANT
New deputy Federal Hwy Administrator for urban roads. CW p17 ... Oct 26
MILLER, C. L.
Engineers and scientists at Stanford radio telescope job. RC p20 ... Dec 21
MILLER, GEORGE W.
A lot is in a name: Chesapeake Bay Bridge—Tunnel should be called so. RC p16 ... Oct 19
MINTON, C. M.
Foreign aid consultants: pro and con. RC p6 ... Nov 30
MIRICK, R. F.
Denver & Rio Grande Western Railroad Co. is proper name. RC p8 ... Jul 6
MOORE, LEWIS E.
Del-Mar-Va Connection is good name for new Chesapeake Bay crossing. RC p16 ... Oct 19
NELSON, SAMUEL B.
Clarity on the Colorado. RC p6 ... Aug 17
NOVICK, DAVID
Soil Mechanics division of Illinois ASCE discusses construction failures. RC p14 ... Oct 12
NOYES, EDWARD N.
Noted Texas consultant dies. p25 ... Aug 31
O'DELL, CLANCY
Tunnel boss never on a small job,*. p44 ... Dec 21
O'REILLY, HUBERT R.
Send old engineering magazines to overseas libraries. RC p8 ... Oct 26
PANISH, CHARLES K.
Army man defends land swap for Narrows Bridge job. RC p8 ... Oct 12
PERINI, JOSEPH R. Jr.
Becomes president of Perini Quebec,*. p78 ... Oct 19
PETERSEN, F. A.
In defense of metal prefabs. RC p8 ... Jul 13
Scaffold tests questioned. RC p13 ... Dec 14
PETTY, HERBERT R.
Tower for air conditioning units in Houston hotel,*, diag. p42 ... Aug 3
PHILLIPS, LAURENCE J.
Extra light concrete error corrected. RC p12 ... Nov 2
PRESTON, KENT
Statements on prestressed concrete challenged. RC p8 ... Dec 14
PRIVAT, EULA B.
Are housing codes un-American? RC p6 ... Aug 10
PULS, LOUIS G.
Leaves Bureau of Reclamation,*. p78 ... Oct 19
RAGANATI, TOM
Verrazano and the Narrows Bridge. RC p6 ... Aug 10
REYBOLD, LT. GEN. EUGENE
World War II chief of Army Engineers dies at 77,*. p25 ... Nov 30
ROBINSON, G. A.
Clay pipe for D.C. sewer job. RC p8 ... Jul 13
ROSENFIELD, ISADORE
Against clover leaf hospital design. RC p8 ... Nov 16
ROYER, KING
Shelters: some protection vs none. RC p12 ... Nov 23
RUDDY, JOHN M.
Hospital clover leaf design is not new. RC p12 ... Nov 16
Shield doors grow in size and cost,**, diags. p50 ... Nov 23
SAARINEN, EERO
Famed Finnish architect dies at 51,*. p25 ... Sep 14
SAFFORD, D. E.
Electric heating costs. RC p7 ... Nov 23
SALIBIAN, ALBERT
American Cement HQ in Los Angeles: showcase for dramatic uses of concrete,**. p46 ... Aug 17
SAWYER, HERBERT A. Jr.
Owls Head sewage plant tank corrosion. RC p8 ... Dec 21
SCHLENZ, HARRY E.
Will head Water Pollution Control Federation,*. p61 ... Oct 12
SCHREIBER, EUGENE J.
Peace Corps roadbuilders are set for Tanganyika,**. p44 ... Sep 21
SCHUSZLER, ALOYSIUS
Try women in construction. RC p10 ... Aug 17
SCHWEDLER, ROLF
West Berlin's construction chief ready for Soviet blockade,*. p24 ... Aug 10
SEMENZA, CARLO
Italy's noted dam designer dies,*. p46 ... Dec 21
SHAPIRO, DANIEL
Loads test steel folded plate roof,*. p31 ... Jul 27
SHINN, JOHN
Letter from London: New Towns win approval in Old Great Britain,**. p42 ... Jul 27
SHU-T'IEN LI
Biggest aluminum dome in Detroit "Showcases", RC p10 ... Sep 7
SILVER, G. H.
Tank corrosion at Owls Head sewage plant,*. RC p8 ... Dec 21
SIMPSON, HOWARD
Concrete bearing stress. RC p10 ... Sep 7
Ordinary corrosion wrecked tank at Owls Head sewage plant,*. RC p8 ... Dec 21
SLOCUM, HARVEY
Famous dam builder dies in India,*. p28 ... Nov 19
SMITH, HAROLD C.
A36 steel cuts cost and weight on Calif factory,**, diag. p30 ... Nov 9
SONTAG, WILLIAM A.
In defense of prefab structures. RC p8 ... Aug 24
SPENCER, EDWIN H.
How much should truckers pay for hwys? RC p7 ... Sep 7
STANFORD, ALAN G.
Past president of NSPE dies. p63 ... Aug 10
STEINMEYER, DON
Hwy engineering: pretzel-bending where taxpayers furnish the dough. RC p8 ... Sep 28
STILLEY, W. A. Jr.
Wood, concrete crosstie saga. RC p6 ... Jul 27
STONG, HILDRETH L.
Wrong caption under flood pix. RC p8 ... Oct 26
STORCH, JOSEPH E.
All welded steel bridge spans the Potomac,**, diags. p32 ... Nov 30
STRIKE, CLIFFORD S.
Spotlight on building: congratulations on May 18 "Moneymakers" story. RC p24 ... Sep 21
SZMAK, G.
Who is responsible for corruption? RC p8 ... Aug 24
TABLER, WILLIAM B.
Success through hotel design,**. p42 ... Nov 30
TARADASH, SAMUEL
Let's not waste money to save Abu Simbel Temples at Aswan Dam. RC p8 ... Sep 28
THOMAS, JACKIE (Miss)
Women in construction praise ENR. RC p8 ... Dec 7
TULLER, J. D.
What to do about graft. RC p11 ... Jul 20
TURNER, F. C.
BPR chief engineer heads US team on Russian hwy tour,*. p26 ... Oct 19
VAN ORMAN, C. R.
Why I quit "working for the government",*. p28 ... Jul 27
VERRAZANO, GIOVANNI DA
The explorer and bridge-naming problems. RCs p6 ... Aug 10
VIOLA, F.
Verrazano and bridge naming. RC p6 ... Aug 10
VOORDUIN, W. L.
Defends economics of Mantary power project, Peru. RC p6 ... Nov 30
WAGNER, PHILIP C.
University of Africa better than saving Abu Simbel Temples for $70m. RC p10 ... Sep 14
WALTER, RICHARD C.
Size of trickling filters. RC p12 ... Oct 26
WARD, JOSEPH S.
Correction on Charles Center, Baltimore. RC p8 ... Sep 28
WEAVER, PETER
Aid funds flow to Latin America, map. p21 ... Aug 17
WEAVER, ROBERT C.
Opposed by Southern members of Congress to become Cabinet member. WO p17 ... Sep 28
WEISS, JOSEPH R.
NYC's deputy superintendent of schools suspended. CW p15 ... Aug 3
WELCH, ALDEN W.
Former ENR Business News Manager, originator of ENR indexes, dies at 73. p51 ... Dec 14
WELLING, BRIG. GEN. ALVIN C.
Becomes deputy for Site Activation in Air Force Ballistic Systems Division. p46 ... Aug 3
WHITTON, REX M.
Administers the federal hwy program,**. p50 ... Jul 27
WILBUR, LYMAN D.
Morrison-Knudsen and Iran jobs. RC p8 ... Sep 28
WILKINSON, JOSEPH F.
ENR editor takes hwy journalism award. p25 ... Oct 12
WILLIAMS, G. B.
Trans-Canada hwy nears completion,**, map. p38 ... Dec 7

WILLIAMS, W. C.
Oregon's chief hwy engineer and WASHO president dies at 64. p51 ... Dec 14

WILSON, LT. GEN. WALTER K. Jr.
Change-order headaches will intensify on space-probe projects. p124 ... Nov 16

WOMACK, JASPER CECIL
California state hwy engineer becomes AASHO's new chief,**. p76 ... Oct 19

WOOD, FRED C.
Cost of new shapes. RC p12 ... Oct 26

WRIGHT, KENNETH R.
Leadville, Colo, strikes warm water,* p41 ... Oct 19

WURMFELD, CHARLES J.
Pirating of engineering personnel. RC p7 ... Jul 20

YOUNG, E. F.
Extra light concrete: error corrected. RC p12 ... Nov 2

ZOLLMAN, CHARLES C.
How to preflex high strength beams, diags. RC p8 ... Aug 3

ZOLPER, HARRY W.
Who is responsible for corruption. RC p8 ... Aug 24

COMPANIES

ABELL-HOWE CO, FOREST PARK, ILL
Counterweight beam lifts and balances panels,*. NP p60 ... Oct 19

ACME INDUSTRIES, JACKSON, MICH
Diverse industrial needs tailor air-handling line. NP p124 ... Dec 21

ALLIED CHEMICAL CORP, NEW YORK, N. Y.
Rigid plastic increases insulation of flat roof. NP p71 ... Nov 16

ALLIS CHALMERS MFG CO, MILWAUKEE, WIS
Shovel features power operation,*. NP p49 ... Dec 7

AMERICAN MACHINE & FOUNDRY, NEW YORK, N. Y.
Machine makes friction weld. NP p57 ... Aug 17
Prototype friction welding machine. NP p45 ... Aug 31

AMERICAN MACHINE & METALS, SELLERSVILLE, PA
Switch shuts down pump when liquid level is low. NP p49 ... Aug 24

AMERICAN RADIATOR & STANDARD SANITARY CORP, DETROIT, MICH
Packaged liquid refrigeration machines. NP p57 ... Nov 23

ANCHOR-WATE CO, HOUSTON, TEX
Prestressed deck has F-section,*. NP p55 ... Aug 10

ARMCO STEEL CORP, MIDDLETOWN, OHIO
Zinc-coated steel grips paint, speeds welding. NP p51 ... Jul 13

ARMSTRONG CORK CO, LANCASTER, PA
Acoustical ceiling vents air,*. NP p65 ... Nov 16

AUTOMASON, EAU CLAIRE, WIS
Brick clamp helps mason spread mortar uniformly,*. NP p58 ... Aug 17

AYERST LABORATORIES, NEW YORK, N. Y.
Skin coating prevents dry or wet cement burns. NP p71 ... Nov 16

BALDERSON INC, WAMEGO, KAN
Pushers and counterweights for Cat loaders,*. NP p49 ... Dec 7

BALDWIN LIMA HAMILTON CORP, LIMA, OHIO
Asphalt plant has c nd controls,*. NP p123 ... Dec 21

BETHLEHEM STEEL CO, BETHLEHEM, PA
One coat enamel process cuts curtain wall costs. NP p55 ... Aug 10

BUCYRUS-ERIE CO, MILWAUKEE, WIS
Hydrocrane mounted on self-propelled wagon,*. NP p70 ... Nov 16

CALDWELD INC, LOS ANGELES, CAL
Horizontal hole driller has 300 ft penetration. NP p40 ... Sep 7

CANTON STOKER CORP, CANTON, OHIO
Package coal boiler feeds and stokes itself,*. NP p56 ... Nov 23

CHARLES MACHINE WORKS, PERRY, OKLA
"T" footing cutter cuts forming,*. NP p49 ... Dec 14

CLEAVER-BROOKS CO, MILWAUKEE, WIS
Big gas boiler designed to fit small spaces. NP p123 ... Dec 21

COLORGUARD CORP, NEW YORK, N. Y.
Vinyl coating colors chain-link fences. NP p143 ... Sep 21

CONSTRUCTION SPECIALTIES, CRANFORD, N. J.
Aluminum penthouses dress up roof vents. NP p56 ... Nov 23

CRESCENT PIPE TONGS CO, BELLFLOWER, CAL
Lightweight tongs quick to pick up pipe,*. NP p50 ... Aug 24

DAVIS MFG, WICHITA, KAN
Self propelled trencher cuts to 36 inches depth. NP p124 ... Dec 21

DAYBROOK DISTRIBUTORS, BOWLING GREEN, OHIO
Hoist makes rear dump out of flat bed truck. NP p45 ... Jul 6

DORR OLIVER INC, STAMFORD, CONN
Series of compact sewage treatment plants, diag. NP p57 ... Aug 17

DOW CHEMICAL CO, CLEVELAND, OHIO
Plastic sheets stack up as trickling filters. NP p50 ... Aug 24
Latex for resurfacing Kentucky bridge deck,**. p26 ... Sep 7

DRESSER INDUSTRIES, BRADFORD, PA
Lightweight pipe repair clamp,*. NP p49 ... Aug 24

EASTERN MARINE PRODUCTS CORP, NEW ROCHELLE, N. Y.
Pneumatic shelter offers glass walls, trucks doors. NP p123 ... Dec 21

ELECTRIC DISTRIBUTION PRODUCTS, ALLENTOWN, PA
Glass fiber insulators reduce busway weight,*. NP p50 ... Jul 13

ERIE STRAYER EXPORT CO, CLEVELAND, OHIO
Three concrete batchers designed for export. NP p143 ... Sep 21
Mobile batchers have interchangeable parts. NP p124 ... Dec 21

FEDERAL PACIFIC ELECTRIC CO, NEWARK, N. J.
Low volt circuit breaker upgrades ampere ratings. NP p55 ... Aug 10

FISCHER & PORTER CO, WARMINSTER, PA.
Analyzer keeps track of chlorine in water. NP p40 ... Sep 7

FLUOR CORP, LOS ANGELES, CAL
Firm ranks estimating as big business, diag. p110 ... Aug 17

GOLDAK CO, GLENDALE, CAL
Lightweight water detector,*. NP p123 ... Dec 21

GOLDBLATT TOOL CO, KANSAS CITY, MO
Pattern spray gun for drywall textures. NP p46 ... Jul 6

GOODRICH (B.F.) CO, AKRON, OHIO
Conveyor belt twists on return trip,*. NP p45 ... Aug 31

GORMAN-RUPP CO, MANSFIELD, OHIO
Submersible pump weighs little, pumps 1000 gpm. NP p46 ... Jul 6

GUILD CONSTRUCTION CO, PROVIDENCE, R. I.
Presents sonic pile driver,**. p24 ... Nov 9

HARNISCHFEGER CORP, MILWAUKEE, WIS
Heavyweight truck crane will hoist 90-ton load. NP p67 ... Jul 20

HAUSERMAN (E.F.) CO, CLEVELAND, OHIO
Folding acoustical partitions act like fixed wall,*. NP p49 ... Dec 14

HOUGH, THE FRANK G. CO, LIBERTYVILLE, ILL
Biggest paydozer weighs 61 tons,*. NP p45 ... Jul 6

HUMBLE OIL AND REFINING CO, NEW YORK, N.Y.
Metal grid cuts fuel oil costs,*. p47 ... Nov 9

HYDRA-BUMPER CO, McPHERSON, KAN
Shock absorber device for push-loading. p61 ... Nov 2

HYSTER CO, DANVILLE, ILL
Fork-lift truck refines air and oil with delicacy. NP p46 ... Jul 6

JOY MFG CO, PITTSBURGH, PA
Rotary percussion rock drill makes U.S. debut,**. NP p44 ... Aug 3

JOHNS-MANVILLE, NEW YORK, N. Y.
Flexboard Trim, wood-like facing acts like stone,*. NP p144 ... Sep 21

KEASBEY AND MATTISON CO, AMBLER, PA
Roof tiles convert wasted space to serviceable area. NP p45 ... Jul 6

KIEWIT (PETER SONS) CO, OMAHA, NEB
Appeal for $20m tax bill. p82 ... Nov 30

KOLMAN MFG CO, SIOUX FALLS, S. D.
Machine backfills automatically,*. NP p59 ... Oct 19

LEAP ASSOCIATES, LAKELAND, FLA
Machine forms prestressed planks,*. NP p47 ... Sep 14

LENNOX INDUSTRIES INC, MARSHALLTOWN, IOWA
Roof top heaters, condensers and cooling evaporators,*. p67 ... Nov 16

L•TOURNEAU, R. G. INC, LONGVIEW, TEXAS
Electricity powers big fork-lift,*. NP p47 ... Sep 14

L•TOURNEAU-WESTINGHOUSE, PEORIA, ILL
Power shift and less weight for redesigned scraper. NP p57 ... Nov 23

LORD MFG CO, ERIE, PA
Rubber and steel fender available in ten sizes. NP p61 ... Nov 2

LULL ENGINEERING CO, ST. PAUL, MINN
Hod buggy designed for fork-lifts,*. NP p39 ... Sep 7

MACK TRUCKS INC, PLAINFIELD, N.J.
Diesel engine power raised without adding weight. NP p65 ... Nov 16

MALAN CONSTRUCTION CO, NEW YORK, N. Y.
Frank Phillips tells how O'Hare terminal was finished ahead of schedule,**. p23 ... Sep 14

MANITOVOC ENGINEERING CORP, MANITOWOC, WIS
Excavator works on land or sea,*. NP p55 ... Aug 10

MERRITT-CHAPMAN & SCOTT CORP, NEW YORK, N. Y.
Construction division operates at a profit. C&I p17 ... Nov 9
Earns big bonus on Priest Rapids project,*. p21 ... Nov 23

MINNEAPOLIS-HONEYWELL, MINNEAPOLIS, MINN.
Automatic control speeds asphalt paving on Iowa Road,*. NP p57 ... Oct 12

MODULE INCINERATORS, PHILADELPHIA, PA
Incinerator rigged to handle bulky trash. NP p45 ... Aug 3

MONROE CO, CLEVELAND, OHIO
Coating plus fiber equals new covering for old roof. NP p51 ... Jul 13

MORRISON-KNUDSEN, BOISE, IDAHO
Trailer construction camp follows jobs,*. p116 ... Dec 21

MORYSVILLE BODY WORKS, BOYERTOWN, PA.
Combination body fits most small trucks. NP p59 ... Oct 19

(Continued)

(Continued)

NATIONAL GYPSUM CO, BUFFALO, N.Y.
Wood shavings brace partition. NP p143 ..... Sep 21
NOVENCO INC, NEW YORK, N.Y.
Danish fan offers variable axial flow. NP p67 ..... Jul 20
PACIFIC CURTAINWALL, LONG BEACH, CAL
Curtain wall interlocks without nuts and bolts. NP p143 ..... Sep 21
PERINI CORPORATION, FRAMINGHAM, MASS
Management changes, Cannon vicepresident, Joseph Perini jr. president of Quebec,*. p78 Oct 19
PHILLIPS CHEMICALS CO, BERTLESVILLE, OKLA
Machine joins plastic pipe,*. NP p143 ..... Sep 21
POLATCH FORESTS INC, LEWISTON, IDAHO
Prefab sub-floor shows finished hardwood face. NP p45 ..... Jul 6
PORTER CO, PITTSBURGH, PA
Under slung motor makes drill more efficient,*. NP p61 ..... Nov 2
POW-R DEVICES INC, CLARENCE CENTER, N. Y.
Pipe puller goes on backhoe,*. NP p39 ..... Sep 7
RUST ENGINEERING CO, PITTSBURGH, PA
Family owned firm plays no favorites,*. p77 ..... Aug 24
STERLING DRUG INC, SOUTH MILWAUKEE, WIS
Zimpro Division starts Zimmerman wet sludge burner designed for small cities,*, diag. NP p40 ..... Nov 30
STOW MFG CO, BINGHAMTON, N. Y.
Floor operated grinder finishes concrete ceilings. NP p50 ..... Jul 13
SWENSON SPREADER & MFG CO, LINDENWOOD, ILL
Two spreaders feature hydraulic cab control, NP p70 ..... Nov 16
TAIT MFG CO, DAYTON, OHIO
Electric generator line provides portable power. NP p67 ..... Jul 20
TESTLAB CORP, CHICAGO, ILL
Instrument firm offers two soil testing devices. NP p58 ..... Aug 17
Portable soil testing devices. NP p65 ..... Nov 16
TRIUMPH METAL PRODUCTS, NEW YORK, N. Y.
Honeycomb core reduces weight of elevator cab. NP p57 ..... Nov 23
UNITED PROGRESS INC, ALBANY, N. Y.
Nu-Way insulation panels of polystyrene. NP p67 ..... Nov 16
U. S. STEEL, NEW YORK, N. Y.
Rolls square tubular shapes,*, table. NP p47 ..... Jul 13
Homes Division expands prefab line. NP p52 ..... Oct 19
WALLACE & TIERNAN, BELLEVILLE, N. J.
Variable area flow meter produced with metal tube. NP p60 ..... Oct 19
WESTINGHOUSE AIR BRAKE CO, SIDNEY, OHIO
Le Roi Division features single or two stage compressors. NP p51 ..... Jul 13
WESTINGHOUSE ELECTRIC CORP, JERSEY CITY, N. J.
Elevator control cuts waiting time. NP p47 ..... Nov 9

ENGINEERING NEWS-RECORD

Published by ENGINEERING NEWS-RECORD
Copyright McGraw-Hill Publ. Co., 1961